# ROADSTAR 11AK30

MODEL

SERVICE MANUAL

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB/ AV-28BS88EN

# SPECIFICATIONS

| Item | Content | | | |
|---|---|---|---|---|
| | AV-28BT8ENS<br>AV-28BT8ENB<br>AV-28BT80EN | AV-28BT8EPS<br>AV-28BT8EPB<br>AV-28BT80EP | AV-28BT8EES<br>AV-28BT8EEB | AV-28BS88EN |
| **Dimensions ( W × H × D )** | 77 x 58 x 48 cm | | | |
| **Mass** | 33.2 kg | | | |
| **TV RF System** | B/G | B/G , L/L' | D/K , K1 | B/G |
| **Colour System** **TV Mode** | PAL | PAL / SECAM | PAL / SECAM | PAL |
| **Video Mode** | PAL / SECAM / NTSC 3.58 / NTSC 4.43 (EP/EE MODELS)<br>PAL / NTSC 3.58 / NTSC 4.43 (EN MODELS) | | | |
| **Sound System** | German + NICAM | | | |
| **Teletext System** | Fastext / Toptext | | | |
| **Receiving Frequency** | | | | |
| **VHF(VL)** | 46.25MHz ～ 168.25MHz | | | |
| **(VH)** | 175.25MHz ～ 463.25MHz | | | |
| **UHF** | 471.25MHz ～ 863.25MHz | | | |
| **CATV** | S01-S41 & S75-S79 | | | |
| **Intermediate Frequency** | | | | |
| **VIF Carrier** | 38.9MHz (B/G , D/K , L) / 33.9MHz(L') | | | |
| **SIF Carrier** | 33.4MHz (5.5MHz:B/G) / 32.9MHz (6.0MHz:D/K) / 32.4MHz (6.5MHz:L) / 40.4MHz (6.5MHz:L') | | | |
| **Colour Sub Carrier Freq.** | | | | |
| **PAL** | 4.43MHz | | | |
| **SECAM** | 4.43MHz | | | |
| **NTSC** | 3.58MHz / 4.43MHz | | | |
| **Power Input** | AC 220V～240V , 50Hz | | | |
| **Power Consumption** | 114W (Max)<br>4W (Standby) | 114W (MAX)<br>4W (Standby) | 114W (MAX)<br>4W (Standby) | 135W (Max)<br>4W (Standby) |
| **Aerial Input Term** | 75 Ω unbalanced, Coaxial | | | |
| **Picture Tube Size** | Visible size : 66cm, Measured diagonally | | | |
| **High Voltage** | 30.3kV | 30.3kV | 30.3kV | 29.6kV |
| **Speaker** | 5.7cm × 16cm Oval type × 2 | | | |
| **Audio Output** | 10W × 2 | | | |
| **Input** **Video** | 1Vp-p, 75 Ω | | | |
| **S/Video** | Y : 1Vp-p Positive<br>C : 0.286Vp-p | | | |
| **Audio(L/R)** | 500mVrms, High Impedance | | | |
| **Output** **Video** | 1Vp-p 75Ω | | | |
| **Audio(L/R)** | 500mVrms, Low Impedance | | | |
| **Input Terminal** **Rear Side** | AV1 (Video/Audio/RGB)<br>AV2 (Video/Audio/S-VHS) | | | |
| **Front Side** | AV3 (Video/Audio) | | | |
| **Output Terminal** **Front Side** | Headphone jack (Stereo mini jack 3.5 $\phi$ ) | | | |
| **Rear Side** | AV1 (Video/Audio)<br>AV2 (Video/Audio) (Selected TV,AV1 or AV3) | | | |
| **Remote Control Unit** | VE-30017763 (RM-C1100), (AA/R06 dry battery × 2) | | | |

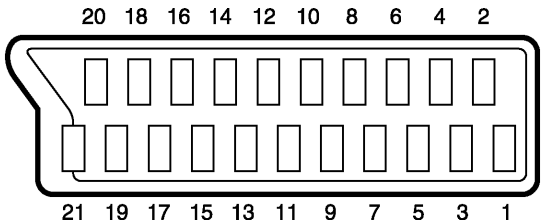
*Design & specifications are subject to change without notice.*

## ■21-pin Euro connector (SCART socket) : AV-1 / AV-2

(P-P= Peak to Peak, S-W= Sync tip to white peak, B-W= Blanking to white peak)

| Pin No. | Signal Designation | Matching Value | AV-1 | AV-2 |
|---|---|---|---|---|
| 1 | AUDIO R output | 500mVrms(Nominal),Low impedance | ○ (TV OUT) | ○ (TV/LINE OUT) |
| 2 | AUDIO R input | 500mVrms(Nominal),High impedance | ○ | ○ |
| 3 | AUDIO L output | 500mVrms(Nominal),Low impedance | ○ (TV OUT) | ○ (TV/LINE OUT) |
| 4 | AUDIO GND | | ○ | ○ |
| 5 | GND (B) | | ○ | ○ |
| 6 | AUDIO L input | 500mVrms(Nominal), High impedance | ○ | ○ |
| 7 | B input | $700mV_{B-W}$, 75Ω | ○ | NC |
| 8 | FUNCTON SW (SLOW SW) | Low : 0-3V, High : 8-12V, High impedance | ○ | NC |
| 9 | GND (G) | | ○ | ○ |
| 10 | - | | NC | - |
| 11 | G input | $700mV_{B-W}$, 75Ω | ○ | NC |
| 12 | - | | NC | - |
| 13 | GND (R) | | ○ | ○ |
| 14 | GND (YS) | | ○ | NC |
| 15 | R / C input | R : $700mV_{B-W}$, 75Ω<br>C : $300mV_{P-P}$, 75Ω | ○ (R/C) | ○ (only C) |
| 16 | Ys input | Low : 0 – 0.4, High : 1 - 3V, 75 Ω | ○ | NC |
| 17 | GND(VIDEO output) | | ○ | ○ |
| 18 | GND(VIDEO input) | | ○ | ○ |
| 19 | VIDEO output | $1V_{S-W}$ (Negative going sync), 75Ω | ○ (TV) | ○ (TV/LINE OUT) |
| 20 | VIDEO / Y input | $1V_{S-W}$ (Negative going sync), 75Ω | ○ | ○ |
| 21 | COMMON GND | | ○ | ○ |

**[Pin assignment]**



# SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE side GND, the ISOLATED(NEUTRAL) side GND and EARTH side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

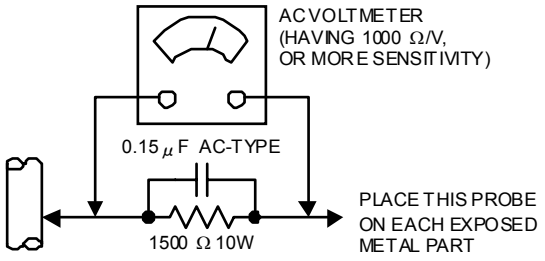
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   **(Safety for Electrical Shock Hazard)**
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



# FEATURES

- 100 programmers from VHF, UHF bands or cable channels can be preset.
- It has two Euroconnector sockets for external devices (such as video recorder, video games, audio set, etc.)
- Stereo sound systems (Nicam + German) are available.
- APS ( Automatic Programming System)

# MAIN DIFFERENCE LIST

| ⚠ | Model Name / Part Name | AV-28BT8ENS<br>AV-28BT8ENB<br>AV-28BT80EN | AV-28BT8EPS<br>AV-28BT8EPB<br>AV-28BT80EP | AV-28BT8EES<br>AV-28BT8EEB | AV-28BS88EN |
|---|---|---|---|---|---|
| | MAIN PWB | VE-20101577 | VE-20101576 | VE-20101622 | VE-20101578 |
| ⚠ | INSTRUCTION BOOK | VE-50028493 | VE-50028296 | VE-50028326 | VE-50028511 |
| ⚠ | FRONT CABINET | VE-20082289(ENS)<br>VE-20081489(ENB)<br>VE-20082289(EN) | VE-20082289(EPS)<br>VE-20081489(EPB)<br>VE-20082289(EP) | VE-20082289(EES)<br>VE-20081489(EEB) | VE-20082289 |
| ⚠ | REAR COVER | VE-20084616(ENS)<br>VE-20069018(ENB)<br>VE-20084616(EN) | VE-20084616(EPS)<br>VE-20069018(EPB)<br>VE-20084616(EP) | VE-20084616(EES)<br>VE-20069018(EEB) | VE-20086416 |
| ⚠ | LENS | VE-20069218<br>(ENS/ENB)<br>VE-20096162(EN) | VE-20069218<br>(EPS/EPB)<br>VE-20096162(EP) | VE-20069218 | VE-20096162 |
| ⚠ | RATING LABEL | VE-20102137(ENS)<br>VE-20102147(ENB)<br>VE-20102144(EN) | VE-20101937(EPS)<br>VE-20101939(EPB)<br>VE-20101934(EP) | VE-20101919(EES)<br>VE-20101915(EEB) | VE-20102141 |
| | CARTON BOX | VE-50028496(ENS)<br>VE-50028502(ENB)<br>VE-50028500(EN) | VE-50028423(EPS)<br>VE-50028424(EPB)<br>VE-50028221(EP) | VE-50028218(EES)<br>VE-50028216(EEB) | VE-50028498 |

**CABINET COLOUR**

| Model Name | FRONT CABINET & REAR COVER | LENS |
|---|---|---|
| AV-28BT8ENS<br>AV-28BT8EPS<br>AV-28BT8EES | SILVER | BLACK |
| AV-28BT8ENB<br>AV-28BT8EPB<br>AV-28BT8EEB | BLACK | BLACK |
| AV-28BT80EN<br>AV-28BT80EP<br>AV-28BS88EP | SILVER | SILVER |

# SPECIFIC SERVICE INSTRUCTIONS

## DISASSEMBLY PROCEDURE

### REMOVING THE REAR COVER

1. Unplug the power cord.
2. Remove the 8 screws marked **A** as shown in the Fig. 1.
3. Remove the 4 screws marked **B** around the AV TERMINAL BOARD.
4. Withdraw the rear cover toward you.

### REMOVING THE AV TERMINAL BOARD

- Removing the rear cover.

1. Remove the 2 screws marked **C** fastened the AV TERMINAL BOARD.
2. Remove the AV TERMINAL BOARD.

### REMOVING THE MAIN PWB

- Removing the rear cover.
- Removing the AV TERMINAL BOARD.

1. Remove the 3 screws marked **D** as shown in the Fig.1.
2. Slightly raise the both sides of the chassis by hand and withdraw the MAIN PWB backward.
   (If necessary, take off the wire clamp, connectors etc.)

### REMOVING THE SPEAKER

- Removing the rear cover.

1. Remove the 4 screws marked **E**, and remove speaker as shown in Fig. 1.
2. Remove the speaker.

### REMOVING THE FRONT AV & HEADPHONE PWB

- Removing the rear cover.
- Removing the MAIN PWB.

1. Remove the 2 screws marked **F**.
2. Remove the FRONT AV & HEADPHONE PWB.

### REMOVING THE FRONT CONTROL PWB

- After removing the rear cover.

1. Remove the MAIN PWB ASS'Y.
2. Remove the **5** screws marked **G**, and remove the FRONT CONTROL PWB.

### CHECKING THE PW BOARD

To check the back side of the PW Board.

1) Pull out the PW Board. (Refer to REMOVING THE MAIN PWB).
2) Erect the PW Board vertically so that you can easily check the back side of the PW Board.

**[CAUTION]**

- When erecting the PW Board, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

### WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

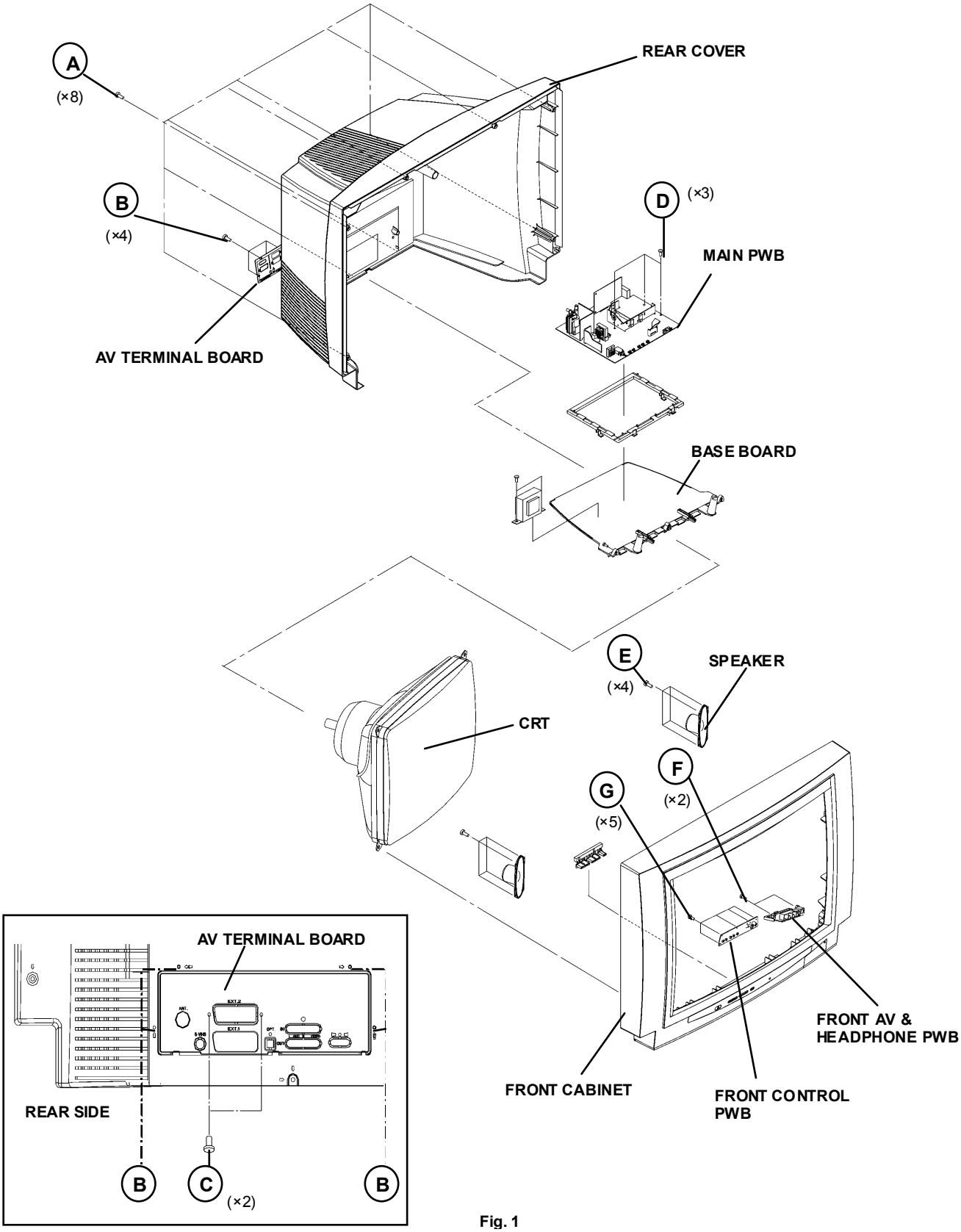

A
(×8)
REAR COVER
B
(×4)
D
(×3)
MAIN PWB
AV TERMINAL BOARD
BASE BOARD
E
(×4)
SPEAKER
CRT
F
(×2)
G
(×5)
FRONT AV &
HEADPHONE PWB
FRONT CABINET
FRONT CONTROL
PWB
AV TERMINAL BOARD
REAR SIDE
B
C
(×2)
B

**Fig. 1**

# REPLACEMENT OF CHIP COMPONENT

## ■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

## ■ SOLDERING IRON

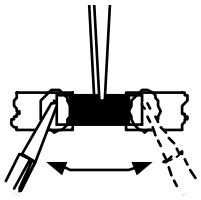
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

## ■ REPLACEMENT STEPS

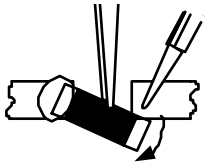
### 1. How to remove Chip parts

◆ **Resistors, capacitors, etc**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

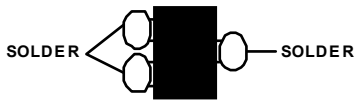


(2) Shift with tweezers and remove the chip part.

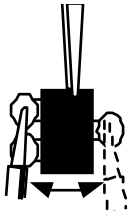


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply extra solder to each lead.




(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

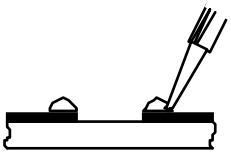


*Note : After removing the part, remove remaining solder from the pattern.*

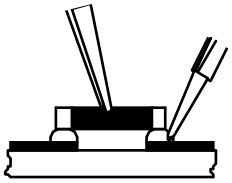
### 2. How to install Chip parts

◆ **Resistors, capacitors, etc**

(1) Apply solder to the pattern as indicated in the figure.

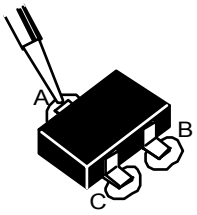


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

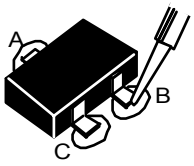


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.




(4) Then solder leads **B** and **C**.



# MEMORY IC REPLACEMENT

## 1. Memory IC

This model use a memory IC.
This memory IC stores data for proper operation of the video and deflection circuits.
When replacing, be sure to use an IC containing this (initial value) data.

## 2. Memory IC replacement procedure

**(1) Power off**

Switch off the power and disconnect the power cord from the wall outlet.

**(2) Replace the memory IC**

Initial value must be entered into the new IC.

**(3) Power on**

Connect the power cord to the wall outlet and switch on the power.

**(4) SERVICE MENU setting**

1) Press MENU key and, while the displayed MENU screen, press **4, 7, 2, 5** key on the remote control unit or press MUTING key and INFORMATION key at the simultaneously.
2) The SERVICE MENU screen of Fig.1 is displayed.
3) Verify what to set in the SERVICE MENU, and set whatever is necessary (Fig.1). Refer to the SERVICE ADJUSTMENT for setting.
4) Press the STANDARD key to exit SERVICE MENU.

**(5) Receive channel setting**

Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.

**(6) User settings**

Check the user setting items according to after page.
Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.

**SERVICE MENU**

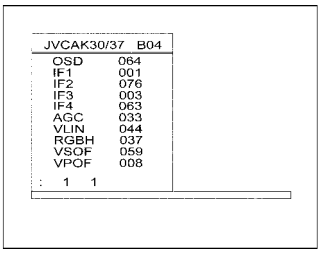



Fig.1

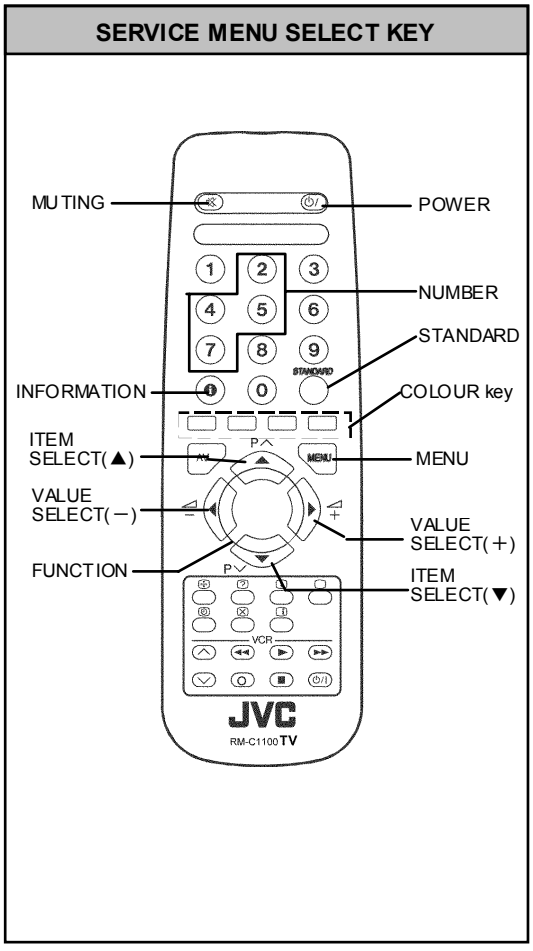



Fig.2

# SETTING OF THE LAST MEMORY FOR SHIPMENT

## ■ USER SETTING VALUES

| Setting Item | Setting Value | Setting Item | Setting Value |
|---|---|---|---|
| SOUND MENU | | FEATURE MENU | |
| BALANCE | CENTER | SLEEP TIMER | OFF |
| BASS | ↑ | CHILD LOCK | OFF |
| TREBLE | ↑ | LANGUAGE | ENGLISH |
| MODE | STEREO | AV-2 OUTPUT | TV |
| EFFECT | OFF | | |
| 3D PANORAMA (only AV-28BS88EN) | OFF | | |
| PICTURE MENU | | INSTALL | |
| BRIGHTNESS | These adjust are automatically restored when APS bit in Service menu is set. The procedure for setting APS bit is described bellow. | PROGRAMME | Refer to the INSTRUCTION BOOK. |
| CONTRAST | | BAND | |
| COLOUR | | CHANNEL | |
| SHARPNESS | | SEARCH | |
| HUE (only NTSC) | | FINE TUNING | |
| PICTURE MODE | AUTO | STORE | |

## ■ SETTING APS BIT IN SERVICE MENU

1) Enter service menu in TV mode by pressing “INFORMATION” and “MUTING” keys simultaneously. Service Menu will appear.
2) Select TX1 (TELETEXT OPTION) by pressing Up/Down keys on remote control unit.
3) Press the 7 key on remote control unit to set APS bit. (After this, bit 7 of TX1 will be “1”)
4) Press STANDARD key on remote control unit to exit service mode.
   NOTE : DO NOT TURN OFF THE TV BY USING POWER BUTTON ON THE FRONT PANEL.

# SERVICE ADJUSTMENTS

## ADJUSTMENT PREPARATION

1. **You can make the necessary adjustments for this unit with either the Remote Control Unit or With the adjustment tools and parts as given below.**
2. **Adjustment with the Remote Control Unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.**
3. Make sure that AC power is turned on correctly.
4. Turn on the power for set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts which are not specified in the list for this adjustment - variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.
   Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.

| | |
|---|---|
| BRIGHTNESS<br>CONTRAST<br>COLOUR | CENTER |
| SHARPNESS | |

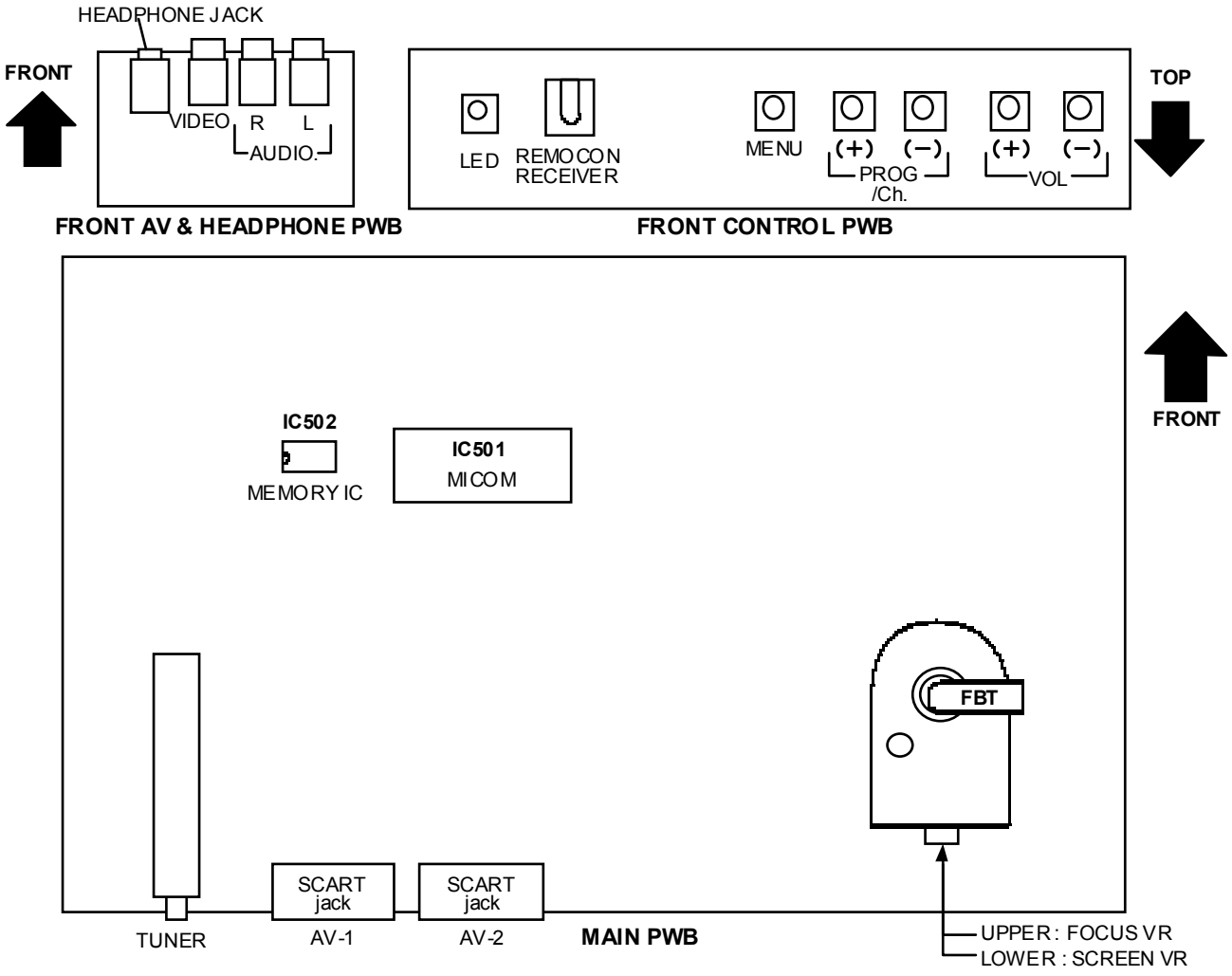
## ADJUSTMENT EQUIPMENT

1. DC voltmeter (or digital voltmeter)
2. Signal generator (Pattern generator) [PAL/SECAM/NTSC]
3. Remote control unit

## ADJUSTMENT ITEM

- SCREEN ADJUSTMENT
- OSD HORIZONTAL POSITION ADJUSTMENT
- IF ADJUSTMENT
- AGC AUTOMATICALLY ADJUSTMENT
- DEFLECTION CIRCUIT ADJUSTMENT
- GEOMETRY MENU ADJUSTMENT
- WHITE BALANCE ADJUSTMENT

## MAIN PARTS LOCATIONS



# BASIC OPERATION SERVICE MENU

## ■ HOW TO ENTER THE SERVICE MENU

1) Press the **MENU** key.
2) MENU screen of fig.1 will be displayed

**MENU SCREEN**

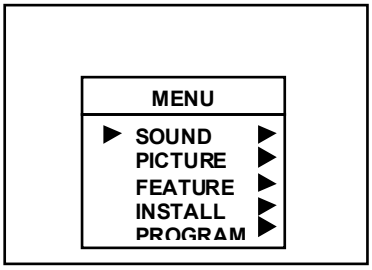



Fig.1

3) While the MENU screen is displayed , press the 4,7,2,5 key or INFORMATION key and MUTING key simultaneously.
4) The SERVICE MENU screen of (Fig.2) will be displayed.

**SERVICE MENU**

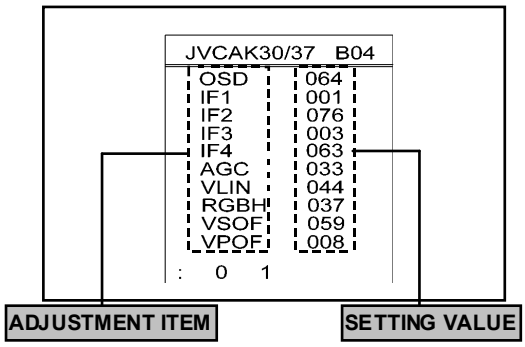



Fig.2

## ■ SELECTION OF ADJUSTMENT ITEMS

1) Enter the SERVICE MENU
2) Press the FUNCTION ▲/▼ key and select the ADJUSTMENT ITEM.
3) Press the FUNCTION ◀/▶ key and set the SETTING VALUE.

## ■ HOW TO EXIT SERVICE MODE

1) Press the **STANDARD** Key on REMOTE CONTROL UNIT.

## ■ HOW TO ENTER THE GEOMETRY MENU

- This model is built-in GEOMETRY MENU for geometry adjustment.

1) Enter the SERVICE MENU
2) Press the GREEN key, geometry menu appears (Fig. 3).
3) Press the FUNCTION ▲/▼ key and select the ADJUSTMENT ITEM.
4) Press the FUNCTION ◀/▶ key and set the SETTING VALUE.

**GEOMETRY MENU**

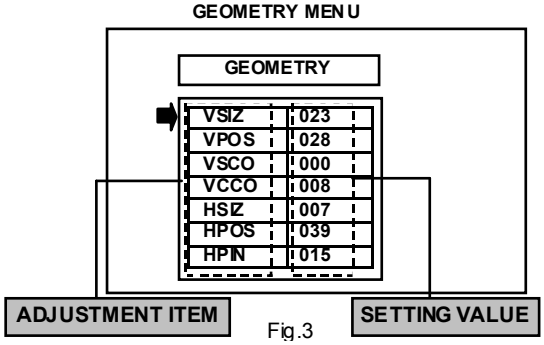
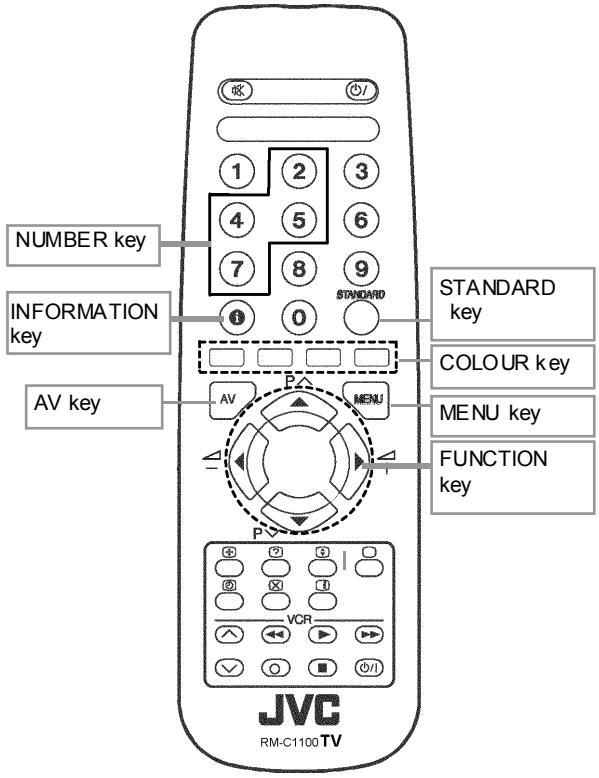



Fig.3

**REMOTE CONTROL UNIT key NAME**




- **FUNCTION OF COLOUR key**

**RED key :**
It switches the AVL to ON or OFF mode on service menu. AVL word is visible on service menu when AVL is on.

**GREEN key :**
It switches to GEOMETRY adjust menu. Geometry of the picture is adjusted in this menu.

**YELLOW key :**
It switches to VERTICAL SCAN DISABLE mode. It is useful to adjust screen voltage.

**BLUE key :**
It is used to adjust AGC and IF automatically on service menu.

## ■ ADJUSTMENT ITEM & INITIAL (Recommended) SETTING VALUE in the SERVICE MENU

1/2

| ADJUSTMENT ITEM | DESCRIPTION | INITIAL VALUE | |
|---|---|---|---|
| OSD | HORIZONTAL POSITION OF OSD | 065 | |
| IF1 | IF COARSE ADJUSTMENT | 004 | |
| IF2 | IF FINE ADJUSTMENT | 065 | |
| IF3 | IF COARSE ADJUSTMENT FOR L-PRIME | 004 | |
| IF4 | IF FINE ADJUSTMENT FOR L-PRIME | 065 | |
| AGC | AUTOMATIC GAIN CONTROL | Automatically | |
| VLIN | VERTICAL LINEARITY | Not used | |
| RGBH | RGB MODE HORIZONTAL SHIFT OFFSET | 007 | |
| VSOF | VERTICAL SIZE OFFSET for 60Hz | -01 | +05 (Only AV-28BS88) |
| VPOF | VERTICAL POSITION OFFSET for 60Hz | -01 | |
| HSOF | HORIZONTAL SIZE OFFSET for 60Hz | +00 | -02 (Only AV-28BS88) |
| HPOF | HORIZONTAL POSITION OFFSET for 60Hz | +00 | -06 (Only AV-28BS88) |
| HTOF | HORIZONTAL TRAPEZOID OFFSET for 60Hz | +01 | -03 (Only AV-28BS88) |
| WR | WHITE POINT ADJUSTMENT FOR RED | 030 | |
| WG | WHITE POINT ADJUSTMENT FOR GREEN | 030 | |
| WB | WHITE POINT ADJUSTMENT FOR BLUE | 030 | |
| BR | BIAS FOR RED | 028 | |
| BG | BIAS FOR GREEN | 029 | |
| APR | AUTOMATIC RGB PEAK REGULATION THRESHOLD | 004 | |
| BRI | BRIGHTNESS | 032 | |
| CON | CONTRAST | 033 | |
| COL | COLOUR | 031 | |
| SHR | SHARP | 006 | |
| HUE | HUE | 031 | |
| VOL | VOLUME | 009 | |
| WR-R | WHITE POINT ADJUSTMENT for RED (RGBmode) | 022 | |
| WG-R | WHITE POINT ADJUSTMENT for GREEN (RGBmode) | 032 | |
| WB-R | WHITE POINT ADJUSTMENT for BLUE (RGBmode) | 022 | |
| FMP1 | FM PRESCALER WHEN AVL IS OFF | Not used | |
| NIP1 | NICAM PRESCALER WHEN AVL IS OFF | Not used | |
| SCP1 | SCART PRESCALER WHEN AVL IS OFF | Not used | |
| SEC1 | SECAM PRESCALER WHEN AVL IS OFF | Not used | |
| FMP2 | FM PRESCALER WHEN AVL IS ON | 015 | |
| NIP2 | NICAM PRESCALER WHEN AVL IS ON | 045 | |
| SCP2 | SCART PRESCALER WHEN AVL IS ON | 017 | |
| SEC2 | SECAM PRESCALER WHEN AVL IS ON | Not used | |
| F1H | HIGH BYTE OF VHF1-VHF3 CROSS-OVER FREQUENCY | 00001001 | |
| F1L | LOW BYTE OF VHF1-VHF3 CROSS-OVER FREQUENCY | 10010010 | |
| F2H | HIGH BYTE OF VHF3-UHF CROSS-OVER FREQUENCY | 00011011 | |
| F2L | LOW BYTE OF VHF3-UHF CROSS-OVER FREQUENCY | 10000010 | |
| BS1 | BAND SWITCHING BYTE FOR VHF1 | 00000011 | |
| BS2 | BAND SWITCHING BYTE FOR VHF3 | 00000110 | |
| BS3 | BAND SWITCHING BYTE FOR UHF | 10000101 | |
| CB | CONTROL BYTE | 10001110 | |
| OP1 | PERIPHERAL OPTIONS | 01110101 | |

| ADJUSTMENT ITEM | DESCRIPTION | INITIAL VALUE |
|---|---|---|
| OP2 | RECEPTION STANDARD OPTIONS | 00001001 (EN)<br>01011001 (EP)<br>00011001 (EE) |
| OP3 | VIDEO OPTIONS | 01101100(EN)<br>11101100(EP/EE) |
| OP4 | TV FEATURES | 10001000 |
| OP5 | CHANNEL TABLES | 0000000D |
| TX1 | TELETEXT OPTIONS | 11010101 (EN)<br>11000101 (EP)<br>11001101 (EE) |
| GEOM | GEOMETRY OPTIONS | 00100000 |
| OP8 | PIP PRESET CHANGE | 00000100 |

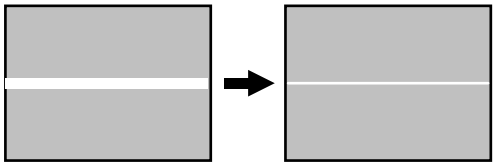
**[GEOMETRY MENU]**

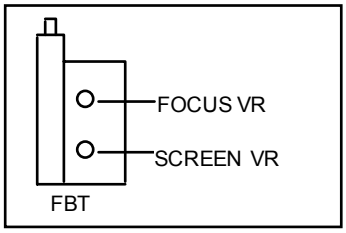
| ADJUSTMENT ITEM | DESCRIPTION | INITIAL VALUE | |
|---|---|---|---|
| | | 4:3 MODE | 16:9 MODE |
| VSIZ | VERTICAL SIZE for 50Hz | 038 | 009 |
| VPOS | VERTICAL POSITION for 50Hz | 022 | 025 |
| VSCO | VERTICAL S-CORRECTION for 50Hz | 005 | 005 |
| VCCO | VERTICAL CORNER CORRECTION for 50Hz | 007 | 007 |
| HSIZ | HORIZONTAL SIZE for 50Hz | 009 | 013 |
| HPOS | HORIZONTAL POSITION for 50Hz | 030 | 030 |
| HPIN | HORIZONTAL PINCUSHION for 50Hz | 014 | 012 |
| HCCO | HORIZONTAL CORNER CORRECTION for 50Hz | 010 | 010 |
| HTRP | HORIZONTAL TRAPEZOID for 50Hz | 013 | 018 |
| VZSZ | VERTICAL ZOOM SIZE for 50Hz | Not used | Not used |

# ADJUSTMENTS

## ■ SCREEN ADJUSTMENT

| Item | Measuring instrument | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **SCREEN adjustment** | **Remote control unit** | | **SCREEN VR [On the FBT]** | 1. Enter SERVICE MENU.<br>2. Press YELLOW key to disable vertical scan.<br>3. Adjust SCREEN VR. on the FBT as thin as possible.<br>4. Press YELLOW key again to enable vertical scan.<br>5. Press STANDARD key to leave service menu. |

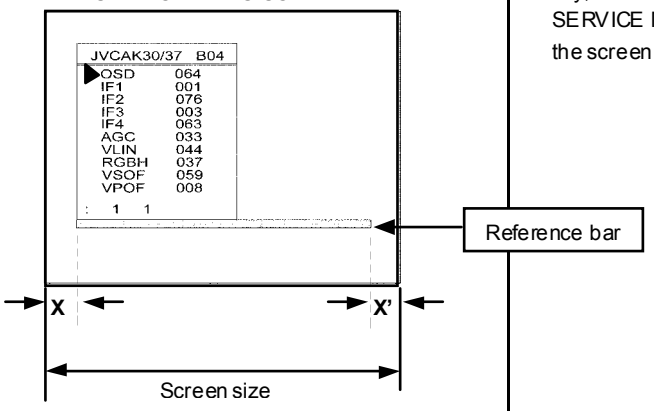





## ■ OSD HORIZONTAL POSITION ADJUSTMENT

| Item | Measuring instrument | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **HORIZONTAL POSITION OF OSD adjustment** | **Remote control unit** | | **OSD** | 1. Enter SERVICE MENU.<br>2. Select OSD with FUNCTION (▲/▼) key<br>3. Adjust the OSD horizontal position with the FUNCTION (◄/►) key, which shifts the reference bar on the bottom of the SERVICE MENU horizontally, so that the OSD is positioned on the screen center. (**X=X'**) |

SERVICE MENU SCREEN



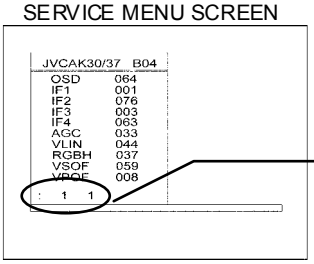

## ■ IF ADJUSTMENT

| Item | Measuring instrument | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **IF adjustment** | **Remote control unit** | | **IF 1**<br>**IF 2**<br>**IF 3**<br>**IF 4** | 1. Receive a PAL colour bar pattern.<br>2. Enter SERVICE MENU.<br>3. Select IF 1 with FUNCTION (▲/▼) key<br>4. Press BLUE key during IF 1 is highlighted, IF 1 and IF 2 values are adjusted automatically by software.<br>5. If the standard is L-prime, IF 3 and IF 4 values are adjustment automatically when BLUE key is pressed during IF 1 is highlighted. |

## ■ AGC AUTOMATICALLY ADJUSTMENT

| Item | Measuring instrument | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **AGC AUTOMATIC-ALLY adjustment & check** | **Remote control unit** | | **AGC** | 1. Enter SERVICE MENU.<br>2. Receive a 60dB μV RF signal level.<br>3. Select AGC with the FUNCTION (▲/▼) key.<br>4. Press BLUE key on the remote control unit.<br>5. Then the adjustment will be done automatically by software.<br>6. See the AGC indicator on SERVICE MENU, it must be "1".<br>7. Check that picture is normal at 90dB μV signal level. |

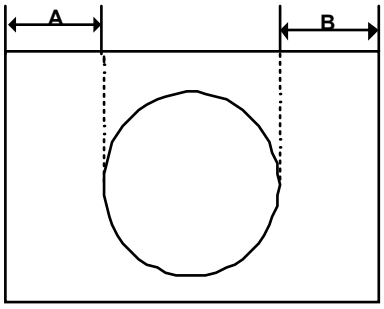
SERVICE MENU SCREEN



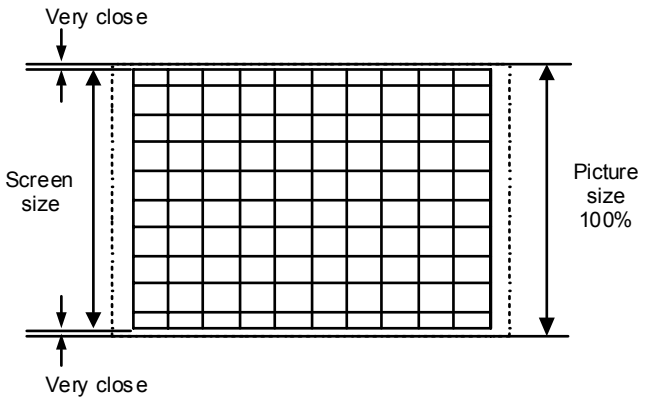

| : | 1 | 1 |
|---|---|---|
| **IF INDICATOR** | **AGC INDICATOR** | **NONE** |

## ■ DEFLECTION CIRCUIT ADJUSTMENT

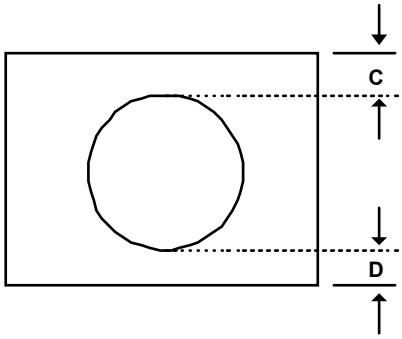
| Item | Measuring instrument | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **RGB MODE HORIZONTAL SHIFT OFFSET adjustment** | **Signal generator**<br><br>**Remote control unit** | | **RGBH** | 1. Input R/G/B circle pattern signal via video input terminal.<br>2. Press AV key on the remote control unit, force the TV to RGB mode.<br>3. Enter SERVICE MENU.<br>4. Select RGBH with the FUNCTION (▲/▼) key.<br>5. Adjust RGBH with the FUNCTION (◄/►) key until the circle pattern is horizontally centered.(**A=B**)<br>6. Check and readjust RGBH item if the adjustment becomes improper after some other geometric adjustments are done. |

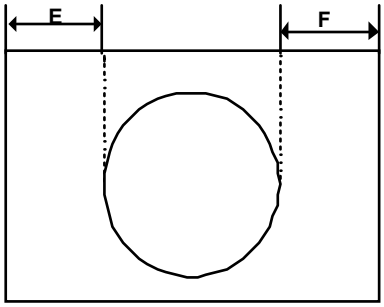


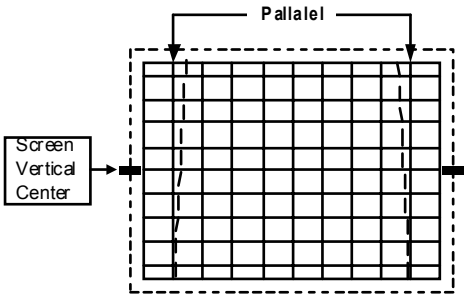

| **VERTICAL SIZE OFFSET adjustment (60Hz)** | **Signal generator**<br><br>**Remote control unit** | | **VSOF** | 1. Receive a NTSC-M cross-hatch pattern of vertical frequency 60Hz.<br>2. Enter SERVICE MENU.<br>3. Select VSOF with the FUNCTION (▲/▼) key.<br>4. Adjust VSOF with the FUNCTION (◄/►) key until the horizontal black lines on both the upper and lower part of the pattern become very close to the upper and lower horizontal sides of picture size and nearly about to disappear.<br>5. Check and readjust VSOF item if the adjustment becomes improper after some other geometric adjustments are done. |
|---|---|---|---|---|



| Item | Measuring instruments | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **VERTICAL POSITION OFFSET adjustment (60Hz)** | **Signal generator**<br><br>**Remote control unit** | | **VPOF** | 1. Receive a NTSC-M circle pattern of vertical frequency 60Hz.<br>2. Enter SERVICE MENU.<br>3. Select VPOF with the FUNCTION (▲/▼) key.<br>4. Adjust VPOF with the FUNCTION ( ◀/▶ ) key until the picturer is vertically centered.(**C=D**)<br>5. Check and readjust vertical position item if the adjustment becomes improper after some other geometric adjustments are done. |
| **HORIZONTAL POSITION OFFSET adjustment (60Hz)** | **Signal Generator**<br><br>**Remote control unit** | | **HPOF** | 1. Receive a NTSC-M circle pattern signal of vertical frequency 60Hz.<br>2. Enter SERVICE MENU.<br>3. Select HPOF with the FUNCTION (▲/▼) key.<br>4. Adjust HPOF with the FUNCTION (◀/▶) key until the circle pattern is horizontally centered.(**E=F**)<br>5. Check and readjust a horizontal position item if the adjustment becomes improper after some other geometric adjustments are done. |
| **HORIZONTAL TRAPEZOID OFFSET adjustment (60Hz)** | **Signal Generator**<br><br>**Remote control unit** | | **HTOF** | 1. Receive a NTSC-M cross-hatch pattern signal of vertical frequency 60Hz.<br>2. Enter SERVICE MENU.<br>3. Select HTOF with the FUNCTION (▲/▼) key.<br>4. Adjust HTOF with the FUNCTION ( ◀/▶ ) key until both lengths of the upper side and lower side of the closs-hatch pattern become equal.<br>5. Check and readjust HTOF position item if the adjustment becomes improper after some other geometric adjustments are done. |

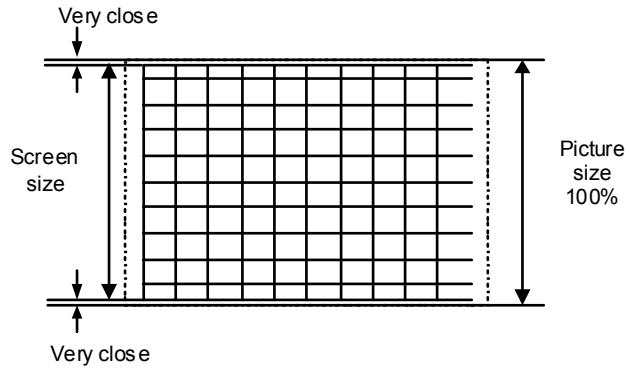


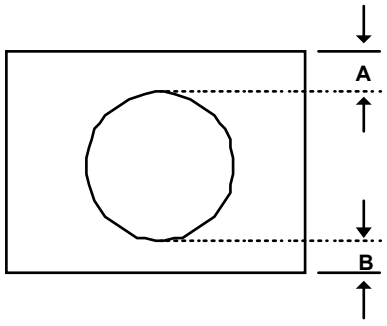



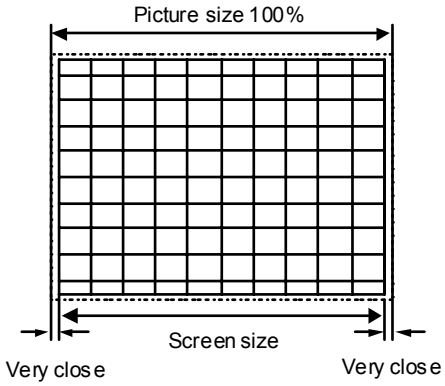
## ■ GEOMETRY MENU ADJUSTMENT (Adjust 4:3MODE / 16:9MODE respectively)

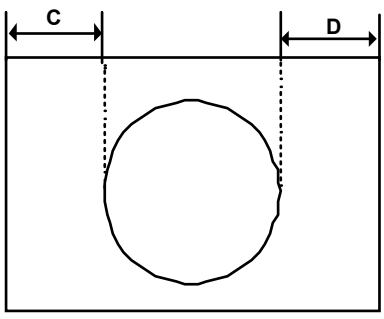
| Item | Measuring instruments | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **VERTICAL SIZE adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **VSIZ** | 1. Receive a PAL B/G cross-hatch pattern of vertical frequency 50Hz.<br>2. Enter SERVICE MENU.<br>3. Press the GREEN then enter the GEOMETRY MENU.<br>4. Select VSIZ (Vertical size) with the FUNCTION (▲/▼) key.<br>5. Adjust VSIZ with the FUNCTION ( ◀/▶ ) key until the horizontal black lines on both the upper and lower part of the pattern become very close to the upper and lower horizontal sides of picture size and nearly about to disappear.<br>6. Check and readjust VSIZ item if the adjustment becomes improper after some other geometric adjustments are done. |
| **VERTICAL POSITION adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **VPOS** | 1. Receive a PAL B/G circle pattern signal of vertical frequency 50Hz.<br>2. Enter GEOMETRY MENU.<br>3. Select VPOS (Vertical position) with the FUNCTION (▲/▼) key.<br>4. Adjust VPOS with the FUNCTION (◀/▶) key until the circle pattern is vertically centered.(**A=B**)<br>5. Check and readjust VPOS item if the adjustment becomes improper after some other geometric adjustments are done. |
| **VERTICAL S-CORREC-TION adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **VSCO** | 1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz.<br>2. Enter GEOMETRY MENU.<br>3. Select VSCO (Vertical s-correction) with the FUNCTION (▲/▼) key.<br>4. Adjust VSCO with the FUNCTION (◀/▶) key until the vertical length of the center squarer of the cross-hatch pattern becomes equal to upper and lower part squares of the cross-hatch pattern.<br>5. Check and readjust VSCO item if the adjustment becomes improper after some other geometric adjustments are done. |



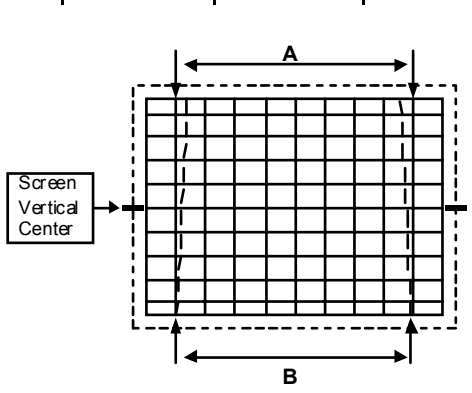



| Item | Measuring instrument | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **VERTICAL CORNER CORRECTION adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **VCCO** | 1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz.<br>2. Enter GEOMETRY MENU.<br>3. Select VCCO (Vertical s-correction) with the FUNCTION (▲/▼) key.<br>4. Adjust VCCO with the FUNCTION (◀/▶) key until the vertical length of the upper and lower part squares of the cross-hatch pattern become equal to each other.<br>5. Check and readjust VCCO item if the adjustment becomes improper after some other geometric adjustments are done. |
| **HORIZONTAL SIZE adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **HSIZ** | 1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz.<br>2. Enter GEOMETRY MENU.<br>3. Select HSIZ (Horizontal size) with the FUNCTION (▲/▼) key.<br>4. Adjust HSIZ with the FUNCTION (◀/▶) key until the vertical black lines on both the left and right part of the cross-hatch pattern become very close to the left and right horizontal sides of picture tube and nearly about to disappear. |
| **HORIZONTAL POSITION adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **HPOS** | 1. Receive a PAL B/G circle pattern signal of vertical frequency 50Hz.<br>2. Enter GEOMETRY MENU.<br>3. Select HPOS with the FUNCTION (▲/▼) key.<br>4. Adjust HPOS with the FUNCTION (◀/▶) key until the circle pattern is horizontally centered.(**C=D**)<br>5. Check and readjust HPOS item if the adjustment becomes improper after some other geometric adjustments are done. |



| Item | Measuring instrument | Test point | Adjustment part | Description |
|---|---|---|---|---|
| **HORIZONTAL PINCUSHION adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **HPIN** | 1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz.<br>2. Enter GEOMETRY MENU.<br>3. Select HPIN (Horizontal pincushion) with the FUNCTION (▲/▼) key.<br>4. Adjust HPIN with the FUNCTION (◀/▶) key until the bending of the vertical line of the cross-hatch pattern are corrected.<br>5. Check and readjust HPIN item if the adjustment becomes improper after some other geometric adjustments are done. |
| **HORIZONTAL CORNER CORRECTION adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **HCCO** | 1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz.<br>2. Enter GEOMETRY MENU.<br>3. Select HCCO (Horizontal corner correction) with the FUNCTION (▲/▼) key.<br>4. Adjust HCCO with the FUNCTION (◀/▶) key until the bending of the vertical line of the cross-hatch pattern are corrected.<br>5. Check and readjust HCCO item if the adjustment becomes improper after some other geometric adjustments are done. |
| **HORIZONTAL TRAPEZOID adjustment (50Hz)** | **Signal generator**<br><br>**Remote control unit** | | **HTRP** | 1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz.<br>2. Enter GEOMETRY MENU.<br>3. Select HTRP (Horizontal trapezoid) with the FUNCTION (▲/▼) key.<br>4. Adjust HTRP with the FUNCTION (◀/▶) key until both lengths of the upper side and lower side of the cross-hatch pattern become equal.(**A=B**)<br>5. Check and readjust HTRP item if the adjustment becomes improper after some other geometric adjustments are done. |



## ■ WHITE BALANCE ADJUSTMENT

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>WHITE BALANCE adjustment (Low light)</td><td>Signal generator<br><br>Remote control unit</td><td></td><td>WR<br>WG<br>WB</td><td>1. Receive a black & white signal (colour off).<br>2. Enter SERVICE MENU.<br>3. Select WR / WG / WB with the (▲/▼) key, respectively.<br>4. Adjust WR / WG / WB with the FUNCTION (◄/►) key, respectively, until the white part turns to pure white without any other color..</td></tr>
<tr><td colspan="5"><table><tr><th>Item</th><th>WR</th><th>WG</th><th>WB</th></tr><tr><td>Recommended value</td><td>030</td><td>030</td><td>030</td></tr></table></td></tr>
<tr><td>WHITE BALANCE adjustment (High light)</td><td>Signal generator<br><br>Remote control unit</td><td></td><td>BR<br>BG</td><td>1. Receive a black & white signal (colour off)<br>2. Enter SERVICE MENU.<br>3. Select BR / BG with the FUNCTION (▲/▼) key respectively.<br>4. Adjust BR / BG with the FUNCTION (◄/►) key respectively until the white part of screen make white colour.</td></tr>
<tr><td colspan="5"><table><tr><th>Item</th><th>BR</th><th>BG</th></tr><tr><td>Recommended value</td><td>028</td><td>029</td></tr></table></td></tr>
</table>

**MEMO**

# PARTS LIST

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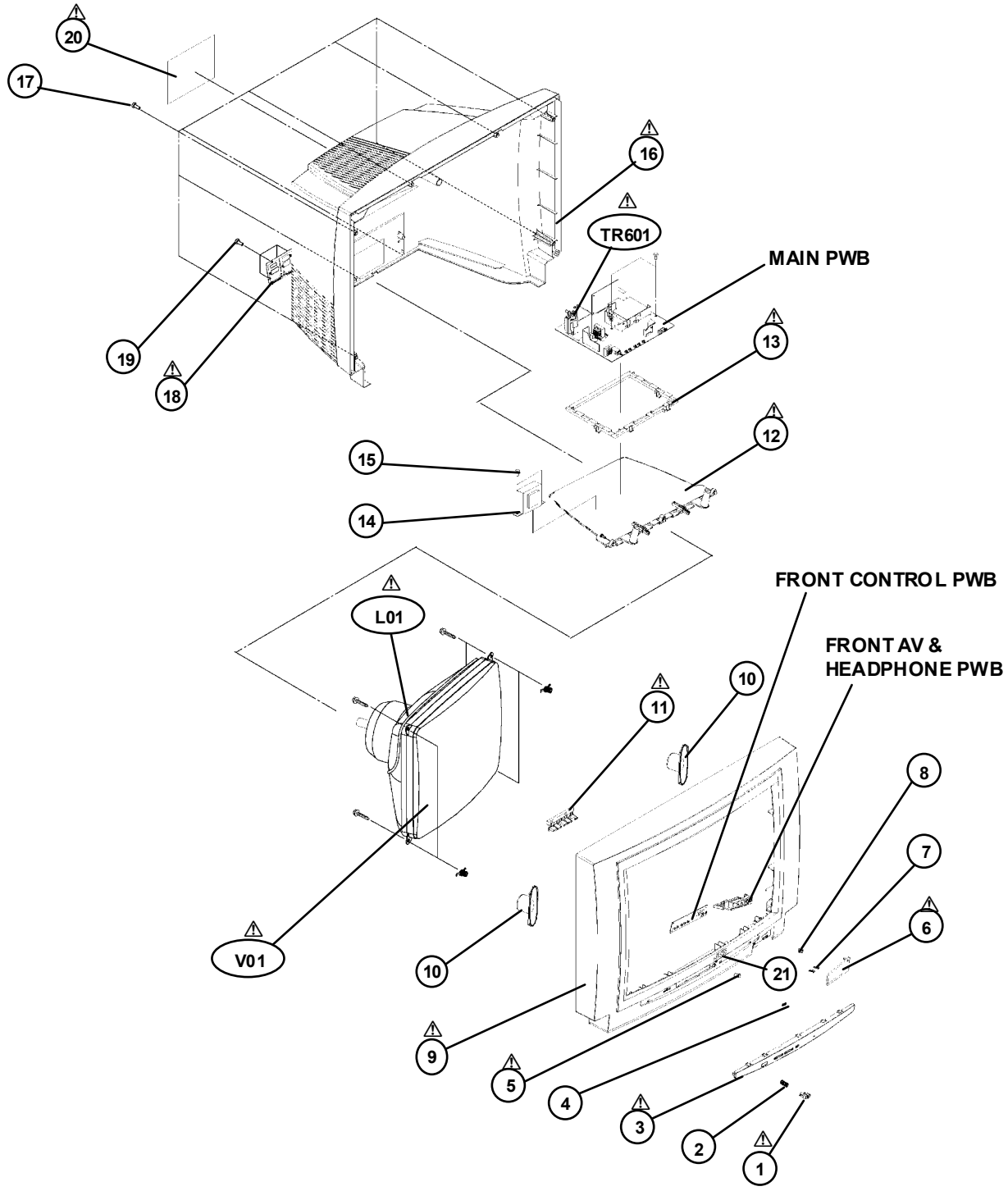
## USING PW BOARD & REMOTE CONTROL UNIT

| Model / PWB ASS'Y | AV-28BT8ENS<br>AV-28BT8ENB<br>AV-28BT80EN | AV-28BT8EPS<br>AV-28BT8EPB<br>AV-28BT80EP | AV-28BT8EES<br>AV-28BT8EEB | AV-28BS88EN |
|---|---|---|---|---|
| MAIN PWB | VE-20101577 | VE-20101576 | VE-20101622 | VE-20101578 |
| CRT SOCKET PWB | VE-20094670 | ← | ← | ← |
| FRONT CONTROL PWB | VE-20082481 | ← | ← | ← |
| FRONT AV & HEADPHONE PWB | VE-20083646 | ← | ← | ← |
| REMOTE CONTROL UNIT | VE-30017763<br>(RM-C1100) | ← | ← | ← |

# EXPLODED VIEW PARTS LIST

| ⚠ | Ref.No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| ⚠ | V01 | VE-30002751 | PICTURE TUBE | (ITC) |
| ⚠ | L01 | VE-30002138 | DEG COIL | |
| ⚠ | TR601 | VE-30017522 | FBT | Within MAIN PWB |
| ⚠ | 1 | VE-20083491 | BUTTON ON/OFF | (SILVER MODEL) |
| ⚠ | 1 | VE-20069016 | BUTTON ON/OFF | (BLACK MODEL) |
| | 2 | VE-35004544 | SPRING | |
| ⚠ | 3 | VE-20069218 | LENS (except AV-28BT80EN,AV-28BT80EP,AV-28BS88EN) | |
| ⚠ | 3 | VE-20096162 | LENS SILVER (AV-28BT80EN,AV-28BT80EP,AV-28BS88EN) | |
| ⚠ | 4 | VE-20078776 | LENS LED | |
| ⚠ | 5 | VE-20004339 | LENS PRE-AMP | |
| ⚠ | 6 | VE-20101840 | FRONT AV DOOR | (SILVER MODEL) |
| ⚠ | 6 | VE-20101841 | FRONT AV DOOR | (BLACK MODEL) |
| | 7 | VE-20003605 | PIN (FRONT AV DOOR) | (X2) |
| | 8 | VE-40000026 | EJECTOR | |
| ⚠ | 9 | VE-20082289 | FRONT CABINET | (SILVER MODEL) |
| ⚠ | 9 | VE-20081489 | FRONT CABINET | (BLACK MODEL) |
| | 10 | VE-30001946 | SPEAKER 8R 15W | (X2) |
| ⚠ | 11 | VE-20083502 | BUTTON FUNCTION | (SILVER MODEL) |
| ⚠ | 11 | VE-20069014 | BUTTON FUNCTION | (BLACK MODEL) |
| ⚠ | 12 | VE-20081578 | BASE | |
| | 13 | VE-20094516 | SHASSIS FRAME | |
| | 14 | VE-30015614 | PFC TRF | |
| | 15 | VE-35000217 | SCREW (3.5X9.5) | (X2) |
| ⚠ | 16 | VE-20084616 | BACK COVER | (SILVER MODEL) |
| ⚠ | 16 | VE-20069018 | BACK COVER | (BLACK MODEL) |
| | 17 | VE-35004572 | SCREW (4X20) | (X8) |
| ⚠ | 18 | VE-20067720 | AV TERMINAL BOARD | |
| | 19 | VE-35000211 | SCREW (2.9X9.5) | (X4) |
| ⚠ | 20 | VE-20102137 | RATING LABEL | (AV-28BT8ENS) |
| ⚠ | 20 | VE-20102147 | RATING LABEL | (AV-28BT8ENB) |
| ⚠ | 20 | VE-20101937 | RATING LABEL | (AV-28BT8EPS) |
| ⚠ | 20 | VE-20101939 | RATING LABEL | (AV-28BT8EPB) |
| ⚠ | 20 | VE-20101919 | RATING LABEL | (AV-28BT8EES) |
| ⚠ | 20 | VE-20101920 | RATING LABEL | (AV-28BT8EES POLAND) |
| ⚠ | 20 | VE-20101915 | RATING LABEL | (AV-28BT8EEB) |
| ⚠ | 20 | VE-20101913 | RATING LABEL | (AV-28BT8EEB POLAND) |
| ⚠ | 20 | VE-20102144 | RATING LABEL | (AV-28BT80EN) |
| ⚠ | 20 | VE-20101934 | RATING LABEL | (AV-28BT80EP) |
| ⚠ | 20 | VE-20102141 | RATING LABEL | (AV-28BS88EN) |
| | 21 | VE-40009154 | LOGO JVC | (SILVER MODEL) |
| | 21 | VE-40009152 | LOGO JVC | (BLACK MODEL) |

# EXPLODED VIEW



# PRINTED WIRING BOARD PARTS LIST

## [ AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN ]

### MAIN P.W. BOARD ASS'Y (VE-20101577)

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R102 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R103 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R106 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R107 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R109 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R110 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R111 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R113 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R114 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R115 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R117 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R118 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R121 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R122 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R123 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R124 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R126 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R129 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R135 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R137 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R138 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R139 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R141 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R145 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R149 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R151 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R152 | VE-30000752 | CF RES. | 1/4W 56K J |
| | R153 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R154 | VE-30000723 | CF RES. | 1/4W 47K J |
| | R155 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R169 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R171 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R172 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R174 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R175 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R176 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R201 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R202 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R204 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R206 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R319 | VE-30014076 | SMD RES. | 1/16W 4.7R J |
| | R320 | VE-30014076 | SMD RES. | 1/16W 4.7R J |
| | R324 | VE-30012667 | SMD RES. | 1/16W 220K J |
| | R328 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R329 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R332 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R333 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R338 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R340 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R341 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R343 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R370 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R371 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R391 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R417 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R418 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R419 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R420 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R421 | VE-30012650 | SMD RES. | 1/16W 15K J |
| | R422 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R423 | VE-30012712 | SMD RES. | 1/16W 8.2K J |
| | R425 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R426 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R427 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R428 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R430 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R431 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R432 | VE-30012707 | SMD RES. | 1/16W 680R J |
| | R433 | VE-30012683 | SMD RES. | 1/16W 330K J |
| | R437 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R438 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R439 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R440 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R441 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R442 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R446 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R447 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R448 | VE-30012683 | SMD RES. | 1/16W 330K J |
| | R449 | VE-30012659 | SMD RES. | 1/16W 2.2K J |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R450 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R458 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R459 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R460 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R461 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R462 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R467 | VE-30000670 | CF RES. | 1/4W 330K J |
| | R468 | VE-30000670 | CF RES. | 1/4W 330K J |
| | R469 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R471 | VE-30014022 | SMD RES. | 1/16W 47R J |
| | R472 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R474 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R481 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R482 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R483 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R485 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R486 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R487 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R507 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R508 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R509 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R510 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R511 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R512 | VE-30000495 | CF RES. | 1/4W 1.2K J |
| | R513 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R514 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R515 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R516 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R517 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R518 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R519 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R525 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R526 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R527 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R528 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R529 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R530 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R532 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R533 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R534 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R537 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R538 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R539 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R540 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R545 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R548 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R554 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R555 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R556 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R560 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R561 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R568 | VE-30000594 | CF RES. | 1/4W 22K J |
| | R572 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R573 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R574 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R603 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R604 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R606 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R607 | VE-30000554 | CF RES. | 1/4W 180R J |
| | R608 | VE-30000859 | MF RES. | 1/2W 1R F |
| | R609 | VE-30000711 | CF RES. | 1/2W 470R J |
| | R610 | VE-30000599 | CF RES. | 1/4W 220K J |
| | R611 | VE-30012708 | SMD RES. | 1/16W 68K J |
| | R614 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R616 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R617 | VE-30000572 | CF RES. | 1/4W 2K J |
| | R630 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R634 | VE-30000633 | CF RES. | 1/4W 27K J |
| | R639 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R640 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R646 | VE-30000531 | CF RES. | 1/4W 15K J |
| | R647 | VE-30000466 | CF RES. | 1/4W 1K J |
| ⚠ | R648 | VE-30001246 | FUSE RES. | 1W 0.47R J |
| | R650 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R651 | VE-30012668 | SMD RES. | 1/16W 220R J |
| ⚠ | R656 | VE-30001230 | FUSE RES. | 1/2W 27R J |
| ⚠ | R657 | VE-30001228 | FUSE RES. | 1/2W 2.2R J |
| | R662 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R666 | VE-30000815 | CF RES. | 1/4W 8.2K J |

## [ AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN ]

### RESISTOR

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | R668 | VE-30000790 | CF RES. | 1/4W 6.8R J |
| | R669 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R670 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R674 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| ⚠ | R675 | VE-30001244 | FUSE RES. | 1/2W 0.47R J |
| | R677 | VE-30001124 | MO RES. | 3W 220R J |
| | R678 | VE-30014022 | SMD RES. | 1/16W 47R J |
| | R680 | VE-30000477 | CF RES. | 1/4W 100K J |
| | R681 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R682 | VE-30008856 | MO RES. | 2W 270R J |
| | R683 | VE-30017083 | WW RES. | 5W 2.2K J RAD. |
| | R689 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R690 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R691 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R692 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R693 | VE-30012708 | SMD RES. | 1/16W 68K J |
| | R694 | VE-30000689 | CF RES. | 1/4W 3.9K J |
| | R695 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R696-Y | VE-30001350 | ZENER DIODE | 12V |
| | R697 | VE-30000712 | CF RES. | 1/4W 470R J |
| | R698 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R699 | VE-30012685 | SMD RES. | 1/16W 33K J |
| | R700 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R701 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R703 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R705 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R715 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R717 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R719 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R721 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R722 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R723 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R724 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R801 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R803 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R805 | VE-30000650 | CF RES. | 1/4W 33R J |
| | R806 | VE-30000982 | MF RES. | 1/4W 4.7K J |
| | R807 | VE-30001173 | MO RES. | 1W 0.47R J |
| | R809 | VE-30007784 | MO RES. | 5W 33K J(RADIAL) |
| ⚠ | R810 | VE-30001257 | MG RES. | 1/2W 4.7M J |
| | R811 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R812 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R813 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R814 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R817 | VE-30000880 | MF RES. | 1/4W 130K F |
| | R818 | VE-30012675 | SMD RES. | 1/16W 2K J |
| | R819 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R828 | VE-30000530 | CF RES. | 1/2W 15K J |
| | R829 | VE-30000530 | CF RES. | 1/2W 15K J |
| | R834 | VE-30001159 | MO RES. | 1W 0.33R J |
| | R836 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R839 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R842 | VE-30014128 | SMD RES. | 1/16W 33R J |
| | R844 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R845 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R846 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R847 | VE-30014128 | SMD RES. | 1/16W 33R J |
| | R848 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R849 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R851 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R852 | VE-30000650 | CF RES. | 1/4W 33R J |
| | R853 | VE-30012642 | SMD RES. | 1/16W 120K J |
| | R855 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R856 | VE-30012694 | SMD RES. | 1/16W 470K J |

### CAPACITOR

| | | | |
|---|---|---|---|
| C141 | VE-30007081 | EL CAP. | 4.7UF 50V M (NPL) |
| C142 | VE-30007081 | EL CAP. | 4.7UF 50V M (NPL) |
| C143 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C144 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C145 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C146 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C147 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C148 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C149 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C150 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C155 | VE-30012560 | SMD CAP. | 100PF 50V J |
| C157 | VE-30012560 | SMD CAP. | 100PF 50V J |
| C159 | VE-30000352 | EL CAP. | 100UF 16V M |
| C160 | VE-30000345 | EL CAP. | 10UF 50V M |
| C161 | VE-30000345 | EL CAP. | 10UF 50V M |

### CAPACITOR

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | C162 | VE-30012573 | SMD CAP. | 47PF 50V J |
| | C164 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | C165 | VE-30000413 | EL CAP. | 4.7UF 50V M |
| | C201 | VE-30000400 | EL CAP. | 47UF 50V M |
| | C205 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C206 | VE-30012610 | SMD CAP. | 10NF 50V J |
| | C207 | VE-30012610 | SMD CAP. | 10NF 50V J |
| | C230 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C246 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C303 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C305 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C310 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C333 | VE-30000083 | MKT CAP. | 150NF 63V J |
| | C363 | VE-30000083 | MKT CAP. | 150NF 63V J |
| | C364 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C366 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C368 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C404 | VE-30000190 | CER CAP. | 100PF 50V J CH |
| | C408 | VE-30012586 | SMD CAP. | 22NF 50V K |
| | C409 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C410 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C411 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C412 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C413 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C414 | VE-30012585 | SMD CAP. | 2.2NF 50V K R |
| | C415 | VE-30012581 | SMD CAP. | 1NF 50V K R |
| | C416 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C417 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C418 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C419 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C420 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C422 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C423 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C424 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C425 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C427 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C429 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C430 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C431 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C432 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C433 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C434 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C435 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C436 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C437 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C438 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C439 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C440 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C441 | VE-30012582 | SMD CAP. | 10NF 50V K R |
| | C442 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C443 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C444 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C448 | VE-30012586 | SMD CAP. | 22NF 50V K |
| | C449 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C453 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C455 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C459 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C501 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C502 | VE-30000400 | EL CAP. | 47UF 50V M |
| | C504 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C505 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C507 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C510 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C511 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C513 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C514 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C515 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C517 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C518 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C519 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C520 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C521 | VE-30012562 | SMD CAP. | 15PF 50V J |
| | C522 | VE-30012562 | SMD CAP. | 15PF 50V J |
| | C523 | VE-30012585 | SMD CAP. | 2.2NF 50V K R |
| | C524 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C525 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C526 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C527 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C529 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C530 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C532 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C536 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C541 | VE-30000362 | EL CAP. | 1UF 50V M |

## [ AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN ]

### CAPACITOR

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | C542 | VE-30000107 | MKT CAP. | 47NF 250V J |
| | C543 | VE-30000431 | CER CAP. | 100PF 1KV M |
| | C544 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C547 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C565 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C566 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C567 | VE-30000431 | CER CAP. | 100PF 1KV M |
| | C602 | VE-30017319 | MKT CAP. | 120NF 63V J |
| | C604 | VE-30000356 | EL CAP. | 100UF 63V M |
| | C605 | VE-30000360 | EL CAP. | 1000UF 25V M |
| | C607 | VE-30012581 | SMD CAP. | 1NF 50V K R |
| ⚠ | C618 | VE-30000159 | MKP CAP. | 4.7NF 1.6KV J |
| ⚠ | C621 | VE-30000179 | MKP CAP. | 9.1NF 1600V %3.5 |
| | C622 | VE-30000121 | KP CAP. | 27NF 630V J |
| ⚠ | C625 | VE-30000156 | MKP CAP. | 430NF 250V J |
| | C627 | VE-30000167 | MKP CAP. | 560NF 250V J |
| | C629 | VE-30000177 | MKP CAP. | 820NF 250V J |
| | C632 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C635 | VE-30000385 | EL CAP. | 2.2UF 250V M |
| | C636 | VE-30000387 | EL CAP. | 33UF 50V M |
| | C640 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C641 | VE-30000090 | MKT CAP. | 22NF 100V J |
| | C642 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C644 | VE-30000409 | EL CAP. | 470UF 25V M |
| | C645 | VE-30000090 | MKT CAP. | 22NF 100V J |
| | C646 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C647 | VE-30007748 | EL CAP. | 1000UF 35V M |
| | C648 | VE-30000394 | EL CAP. | 3.3UF 160V M |
| | C649 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C652 | VE-30000330 | CER CAP. | 4.7NF 50V K B |
| | C653 | VE-30000107 | MKT CAP. | 47NF 250V J |
| | C655 | VE-30000415 | EL CAP. | 4.7UF 250V M |
| | C700 | VE-30012565 | SMD CAP. | 1.8PF 50V J CH |
| | C701 | VE-30012565 | SMD CAP. | 1.8PF 50V J CH |
| | C702 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C703 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C704 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C705 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C706 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C708 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C712 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C713 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C714 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C716 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C717 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C718 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C719 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C720 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C721 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C723 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C724 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C729 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C730 | VE-30000393 | EL CAP. | 3.3UF 50V M |
| | C733 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C734 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C735 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C736 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C737 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C738 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C739 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C740 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C741 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C742 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C745 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| ⚠ | C801 | VE-30000094 | MKT CAP. | 220NF 275V M AC |
| ⚠ | C802 | VE-30000094 | MKT CAP. | 220NF 275V M AC |
| ⚠ | C803 | VE-30000433 | CER CAP. | 1NF 1KV M B |
| ⚠ | C804 | VE-30000433 | CER CAP. | 1NF 1KV M B |
| | C808 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C809 | VE-30000420 | EL CAP. | 150UF 400V M |
| | C810 | VE-30000387 | EL CAP. | 33UF 50V M |
| | C811 | VE-30000161 | MKP CAP. | 47NF 630V J |
| | C812 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| ⚠ | C816 | VE-30000440 | CER CAP. | 2.2NF 4KV M |
| | C817 | VE-30000198 | CER CAP. | 120PF 500V J SL |
| | C818 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C819 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C822 | VE-30007308 | CER CAP. | 220PF 1KV K (PULSE) |
| | C826 | VE-30000406 | EL CAP. | 47UF 250V M (HR) |
| | C827 | VE-30000411 | EL CAP. | 470UF 16V M |
| | C828 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C829 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C830 | VE-30000383 | EL CAP. | 2200UF 25V M |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | C832 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C833 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C834 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C835 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C838 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C839 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C840 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C848 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C850 | VE-30000383 | EL CAP. | 2200UF 25V M |
| | C851 | VE-30012590 | SMD CAP. | 47NF 50V K |
| ⚠ | C852 | VE-30000440 | CER CAP. | 2.2NF 4KV M |
| | C857 | VE-30000106 | MKT CAP. | 47NF 100V J |
| | C858 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| | C859 | VE-30009208 | CER CAP. | 470PF 1KV K (PULSE) |
| | C860 | VE-30000296 | CER CAP. | 100NF 100V Z F |
| | C872 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |

### TRANSF

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | TR600 | VE-30002090 | LINE DRIVER | |
| ⚠ | TR601 | VE-30017522 | FBT TRF | |
| ⚠ | TR802 | VE-30018785 | SMPS TRF | |

### COIL

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| L101 | VE-30001971 | FERRITE BEAT | |
| L102 | VE-30001971 | FERRITE BEAT | |
| L106 | VE-30001971 | FERRITE BEAT | |
| L108 | VE-30001971 | FERRITE BEAT | |
| L109 | VE-30001971 | FERRITE BEAT | |
| L110 | VE-30001971 | FERRITE BEAT | |
| L111 | VE-30001971 | FERRITE BEAT | |
| L112 | VE-30001971 | FERRITE BEAT | |
| L113 | VE-30001971 | FERRITE BEAT | |
| L114 | VE-30001971 | FERRITE BEAT | |
| L115 | VE-30001971 | FERRITE BEAT | |
| L116 | VE-30001971 | FERRITE BEAT | |
| L117 | VE-30001971 | FERRITE BEAT | |
| L201 | VE-30001979 | FIXED COIL | 1UH |
| L210 | VE-30001971 | FERRITE BEAT | |
| L215 | VE-30001971 | FERRITE BEAT | |
| L401 | VE-30001971 | FERRITE BEAT | |
| L402 | VE-30001992 | FIXED COIL | 10UH |
| L403 | VE-30001971 | FERRITE BEAT | |
| L405 | VE-30014048 | ADJ. COIL | 44MHZ |
| L406 | VE-30001971 | FERRITE BEAT | |
| L408 | VE-30001992 | FIXED COIL | 10UH |
| L501 | VE-30001971 | FERRITE BEAT | |
| L502 | VE-30001971 | FERRITE BEAT | |
| L503 | VE-30001971 | FERRITE BEAT | |
| L504 | VE-30001971 | FERRITE BEAT | |
| L600 | VE-30002031 | FIXED COIL | 15MH |
| L602 | VE-30002156 | LINEARITY COIL | 30UH |
| L603 | VE-30002026 | FIXED COIL | 1MH |
| L700 | VE-30001971 | FERRITE BEAT | |
| L701 | VE-30001971 | FERRITE BEAT | |
| L702 | VE-30001992 | FIXED COIL | 10UH |
| L703 | VE-30001971 | FERRITE BEAT | |
| L704 | VE-30001971 | FERRITE BEAT | |
| L801 | VE-30002011 | CHOKE COIL | 150UH |
| L803 | VE-30001992 | FIXED COIL | 10UH |

### DIODE

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| D105 | VE-30007760 | ZENER DIODE | |
| D106 | VE-30007760 | ZENER DIODE | |
| D107 | VE-30007760 | ZENER DIODE | |
| D303 | VE-30001329 | DIODE | |
| D405 | VE-30007763 | ZENER DIODE | |
| D407 | VE-30001284 | DIODE | |
| D408 | VE-30001285 | DIODE | |
| D409 | VE-30001284 | DIODE | |
| D413 | VE-30018526 | ZENER DIODE | |
| D501 | VE-30001285 | DIODE | |
| D505 | VE-30001285 | DIODE | |
| D506 | VE-30001284 | DIODE | |
| D512 | VE-30001285 | DIODE | |
| D513 | VE-30001369 | ZENER DIODE | |
| D533 | VE-30001377 | ZENER DIODE | |

## [ AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN ]

### DIODE

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | D601 | VE-30001329 | DIODE | |
| | D603 | VE-30001285 | DIODE | |
| | D605 | VE-30001320 | DIODE | |
| | D606 | VE-30001323 | DIODE | |
| | D609 | VE-30001318 | DIODE | |
| | D610 | VE-30001318 | DIODE | |
| | D613 | VE-30001318 | DIODE | |
| | D614 | VE-30001285 | DIODE | |
| | D616 | VE-30003696 | DIODE | |
| | D617 | VE-30001318 | DIODE | |
| | D651 | VE-30001285 | DIODE | |
| | D653 | VE-30001285 | DIODE | |
| | D656 | VE-30007763 | ZENER DIODE | |
| | D657 | VE-30007763 | ZENER DIODE | |
| | D658 | VE-30007763 | ZENER DIODE | |
| | D659 | VE-30001350 | ZENER DIODE | |
| | D660 | VE-30001347 | ZENER DIODE | |
| | D661 | VE-30001350 | ZENER DIODE | |
| | D700 | VE-30001285 | DIODE | |
| | D701 | VE-30001369 | ZENER DIODE | |
| | D800 | VE-30001318 | DIODE | |
| | D801 | VE-30001372 | ZENER DIODE | |
| | D802 | VE-30001318 | DIODE | |
| | D803 | VE-30001315 | DIODE | |
| | D804 | VE-30001318 | DIODE | |
| | D805 | VE-30001315 | DIODE | |
| | D806 | VE-30001315 | DIODE | |
| | D808 | VE-20092405 | CN.ASY | |
| | D809 | VE-30001329 | DIODE | |
| | D810 | VE-30009366 | DIODE | |
| | D811 | VE-30009366 | DIODE | |
| | D812 | VE-30001285 | DIODE | |
| | D889 | VE-30001384 | TR | |
| ⚠ | D891 | VE-30007758 | BRIDGE DIODE | |
| | D892 | VE-30001318 | DIODE | |
| | D893 | VE-30001318 | DIODE | |
| | D894 | VE-30001285 | DIODE | |
| | D897 | VE-30001329 | DIODE | |

### TRANSISTOR

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | Q104 | VE-30001457 | TR | |
| | Q106 | VE-30001457 | TR | |
| | Q141 | VE-30001457 | TR | |
| | Q142 | VE-30001457 | TR | |
| | Q307 | VE-30001457 | TR | |
| | Q316 | VE-30001458 | TR | |
| | Q403 | VE-30001457 | TR | |
| | Q404 | VE-30001457 | TR | |
| | Q503 | VE-30001457 | TR | |
| | Q504 | VE-30001458 | TR | |
| | Q600 | VE-30001435 | TR | |
| ⚠ | Q601 | VE-30001441 | TR | H.OUT |
| | Q602 | VE-30001429 | TR | |
| | Q603 | VE-30001458 | TR | |
| | Q604 | VE-30001457 | TR | |
| | Q605 | VE-30001458 | TR | |
| | Q700 | VE-30001458 | TR | |
| | Q801 | VE-30001386 | TR | |
| | Q802 | VE-30001457 | TR | |
| | Q804 | VE-30001454 | TR | |

### IC

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | IC301 | VE-30016113 | IC | |
| | IC403 | VE-30014521 | IC | |
| | IC500 | VE-20099532 | IC | (SERVICE) |
| | IC501 | VE-20093395 | IC | (MICOM) |
| | IC601 | VE-30013985 | IC | |
| | IC700 | VE-30013658 | IC | |
| | IC800 | VE-30011968 | IC | |
| ⚠ | IC801 | VE-30015087 | IC | |
| | IC802 | VE-30001622 | IC | |
| | IC803 | VE-30001500 | IC | |
| | IC804 | VE-30001622 | IC | |
| | IC818 | VE-30001506 | IC | |

### OTHERS

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| ⚠ | TR801 | VE-30002104 | LINE FILTER | |
| ⚠ | F801 | VE-30001731 | FUSE | 2.5A |
| ⚠ | TH800 | VE-30001270 | PTC | 9 OHM |
| | TU201 | VE-30009637 | TUNER | |
| | VR800 | VE-30001064 | RES ADJ | |
| | X401 | VE-30001749 | XTAL | |
| | X402 | VE-30015592 | XTAL | |
| | X501 | VE-30002851 | XTAL | |
| | X700 | VE-30001756 | XTAL | |
| | Z401 | VE-30001705 | SAW FILTER | |
| | Z402 | VE-30015591 | SAW FILTER | |

## [ AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN ]

### CRT SOCKET P.W. BOARD ASS'Y (VE-20094670)

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R900 | 30000788 | CF RES. | 1/4W 6.8M J |
| | R902 | 30000459 | CF RES. | 1/4W 100R J |
| | R903 | 30000459 | CF RES. | 1/4W 100R J |
| | R904 | 30000459 | CF RES. | 1/4W 100R J |
| | R906 | 30000535 | CF RES. | 1/2W 150K J |
| | R907 | 30000477 | CF RES. | 1/4W 100K J |
| | R908 | 30000477 | CF RES. | 1/4W 100K J |
| | R909 | 30000525 | CF RES. | 1/2W 1.5K J |
| | R910 | 30000525 | CF RES. | 1/2W 1.5K J |
| | R911 | 30000525 | CF RES. | 1/2W 1.5K J |
| | R912 | 30000477 | CF RES. | 1/4W 100K J |
| | R913 | 30000525 | CF RES. | 1/2W 1.5K J |
| | R914 | 30001084 | MO RES. | 1W 1K J |
| | R916 | 30001170 | MO RES. | 1W 4.7K J |
| ⚠ | R917 | 30001208 | FUSE RES. | 1W 10R J |
| | R918 | 30000471 | CF RES. | 1/4W 10K J |
| | R921 | 30000599 | CF RES. | 1/4W 220K J |
| | R922 | 30000590 | CF RES. | 1/4W 2.2K J |
| | **CAPACITOR** | | | |
| | C900 | 30000075 | MKT CAP. | 100NF 250V K (DC) |
| | C902 | 30000415 | EL CAP. | 4.7UF 250V M |
| | C903 | 30000438 | CER CAP. | 2.2NF 2KV |
| | C904 | 30000295 | CER CAP. | 100NF 50V Z F |
| | C905 | 30000234 | CER CAP. | 270PF 50V J SL |
| | C906 | 30000350 | EL CAP. | 10UF 250V M |
| | C907 | 30000075 | MKT CAP. | 100NF 250V K (DC) |
| | C909 | 30000385 | EL CAP. | 2.2UF 250V M |
| | C910 | 30000438 | CER CAP. | 2.2NF 2KV |
| | C911 | 30000433 | CER CAP. | 1NF 1KV M B |
| | **COIL** | | | |
| | L900 | 30002170 | COIL | |
| | **DIODE** | | | |
| | D901 | 30001329 | DIODE | |
| | D902 | 30001318 | DIODE | |
| | D903 | 30001329 | DIODE | |
| | D904 | 30001329 | DIODE | |
| | D905 | 30001284 | DIODE | |
| | D906 | 30001284 | DIODE | |
| | D907 | 30001284 | DIODE | |
| | D908 | 30001284 | DIODE | |
| | D909 | 30001344 | ZENER DIODE | |
| | NOT1 | 30001329 | DIODE | |
| | **TRANSISTOR** | | | |
| | Q900 | 30001427 | TR | |
| | Q901 | 30001454 | TR | |
| | **IC** | | | |
| | IC900 | 30008721 | IC | |
| | **OTHERS** | | | |
| ⚠ | PL902 | 30001855 | CRT SOCKET | |
| | SG901 | 30000428 | SPARK GAP | 300V |
| | SG902 | 30000428 | SPARK GAP | 300V |
| | SG903 | 30000428 | SPARK GAP | 300V |
| | SG904 | 30000428 | SPARK GAP | 300V |

### FRONT CONTROL P.W. BOARD ASS'Y (VE-20082481)

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R2 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R3 | VE-30000770 | CF RES. | 1/4W 680R J |
| | R4 | VE-30000712 | CF RES. | 1/4W 470R J |
| | R5 | VE-30000622 | CF RES. | 1/4W 270R J |
| | **DIODE** | | | |
| | D1 | VE-30001279 | LED RED/GREEN | |
| | **IC** | | | |
| | IC1 | VE-30001670 | PREAMPLIFIER | |
| | **OTHERS** | | | |
| | SW1 | VE-30002181 | SWITCH TACT | |
| | SW2 | VE-30002181 | SWITCH TACT | |
| | SW3 | VE-30002181 | SWITCH TACT | |
| | SW4 | VE-30002181 | SWITCH TACT | |
| | SW5 | VE-30002181 | SWITCH TACT | |

### FRONT AV & HEADPHONE P.W. BOARD ASS'Y (VE-20083646)

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R109 | VE-30000594 | CF RES. | 1/4W 22K J |
| | R110 | VE-30000712 | CF RES. | 1/4W 470R J |
| | R113 | VE-30000744 | CF RES. | 1/4W 560R J |
| | R114 | VE-30000744 | CF RES. | 1/4W 560R J |
| | R115 | VE-30000712 | CF RES. | 1/4W 470R J |
| | R116 | VE-30000712 | CF RES. | 1/4W 470R J |
| | **CAPACITOR** | | | |
| | C103 | VE-30000213 | CER CAP. | 180PF 50V J |
| | C104 | VE-30000213 | CER CAP. | 180PF 50V J |
| | C106 | VE-30000190 | CER CAP. | 100PF 50V J |
| | **COIL** | | | |
| | L103 | VE-30001996 | FIXED COIL | 22UH Q40 K |
| | L104 | VE-30001996 | FIXED COIL | 22UH Q40 K |

# PRINTED WIRING BOARD PARTS LIST

## [ AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP ]

### MAIN P.W. BOARD ASS'Y (VE-20101576)

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R102 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R103 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R106 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R107 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R109 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R110 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R111 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R113 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R114 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R115 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R117 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R118 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R121 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R122 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R123 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R124 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R126 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R129 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R135 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R137 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R138 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R139 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R141 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R145 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R149 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R151 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R152 | VE-30000752 | CF RES. | 1/4W 56K J |
| | R153 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R154 | VE-30000723 | CF RES. | 1/4W 47K J |
| | R155 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R169 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R171 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R172 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R174 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R175 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R176 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R201 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R202 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R204 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R206 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R319 | VE-30014076 | SMD RES. | 1/16W 4.7R J |
| | R320 | VE-30014076 | SMD RES. | 1/16W 4.7R J |
| | R324 | VE-30012667 | SMD RES. | 1/16W 220K J |
| | R328 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R329 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R332 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R333 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R338 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R340 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R341 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R343 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R370 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R371 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R391 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R402 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R407 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R410 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R412 | VE-30000723 | CF RES. | 1/4W 47K J |
| | R417 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R418 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R419 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R420 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R421 | VE-30012650 | SMD RES. | 1/16W 15K J |
| | R422 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R423 | VE-30012712 | SMD RES. | 1/16W 8.2K J |
| | R425 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R426 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R427 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R428 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R430 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R431 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R432 | VE-30012707 | SMD RES. | 1/16W 680R J |
| | R433 | VE-30012683 | SMD RES. | 1/16W 330K J |
| | R437 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R438 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R439 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R440 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R441 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R442 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R446 | VE-30012714 | SMD RES. | 1/16W 820R J |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R447 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R448 | VE-30012683 | SMD RES. | 1/16W 330K J |
| | R449 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R450 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R458 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R459 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R460 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R461 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R462 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R467 | VE-30000670 | CF RES. | 1/4W 330K J |
| | R468 | VE-30000670 | CF RES. | 1/4W 330K J |
| | R469 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R471 | VE-30014022 | SMD RES. | 1/16W 47R J |
| | R472 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R474 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R481 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R482 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R483 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R485 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R486 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R487 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R507 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R508 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R509 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R510 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R511 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R512 | VE-30000495 | CF RES. | 1/4W 1.2K J |
| | R513 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R514 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R515 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R516 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R517 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R518 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R519 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R525 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R526 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R527 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R528 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R529 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R530 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R532 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R533 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R534 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R537 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R538 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R539 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R540 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R545 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R548 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R552 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R554 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R555 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R556 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R560 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R561 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R568 | VE-30000594 | CF RES. | 1/4W 22K J |
| | R572 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R573 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R574 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R603 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R604 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R606 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R607 | VE-30000554 | CF RES. | 1/4W 180R J |
| | R608 | VE-30000859 | MF RES. | 1/2W 1R F |
| | R609 | VE-30000711 | CF RES. | 1/2W 470R J |
| | R610 | VE-30000599 | CF RES. | 1/4W 220K J |
| | R611 | VE-30012708 | SMD RES. | 1/16W 68K J |
| | R614 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R616 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R617 | VE-30000572 | CF RES. | 1/4W 2K J |
| | R630 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R634 | VE-30000633 | CF RES. | 1/4W 27K J |
| | R639 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R640 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R646 | VE-30000531 | CF RES. | 1/4W 15K J |
| | R647 | VE-30000466 | CF RES. | 1/4W 1K J |
| ⚠ | R648 | VE-30001246 | FUSE RES. | 1W 0.47R J |
| | R650 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R651 | VE-30012668 | SMD RES. | 1/16W 220R J |
| ⚠ | R656 | VE-30001230 | FUSE RES. | 1/2W 27R J |

## [ AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP ]

### RESISTOR

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| ⚠ | R657 | VE-30001228 | FUSE RES. | 1/2W 2.2R J |
| | R662 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R666 | VE-30000815 | CF RES. | 1/4W 8.2K J |
| | R668 | VE-30000790 | CF RES. | 1/4W 6.8R J |
| | R669 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R670 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R674 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| ⚠ | R675 | VE-30001244 | FUSE RES. | 1/2W 0.47R J |
| | R677 | VE-30001124 | MO RES. | 3W 220R J |
| | R678 | VE-30014022 | SMD RES. | 1/16W 47R J |
| | R680 | VE-30000477 | CF RES. | 1/4W 100K J |
| | R681 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R682 | VE-30008856 | MO RES. | 2W 270R J |
| | R683 | VE-30017083 | WW RES. | 5W 2.2K J RAD. |
| | R689 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R690 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R691 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R692 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R693 | VE-30012708 | SMD RES. | 1/16W 68K J |
| | R694 | VE-30000689 | CF RES. | 1/4W 3.9K J |
| | R695 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R696-Y | VE-30001350 | ZENER DIODE | 12V |
| | R697 | VE-30000712 | CF RES. | 1/4W 470R J |
| | R698 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R699 | VE-30012685 | SMD RES. | 1/16W 33K J |
| | R700 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R701 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R703 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R705 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R715 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R717 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R719 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R721 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R722 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R723 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R724 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R801 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R803 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R805 | VE-30000650 | CF RES. | 1/4W 33R J |
| | R806 | VE-30000982 | MF RES. | 1/4W 4.7K J |
| | R807 | VE-30001173 | MO RES. | 1W 0.47R J |
| | R809 | VE-30007784 | MO RES. | 5W 33K J(RADIAL) |
| ⚠ | R810 | VE-30001257 | MG RES. | 1/2W 4.7M J |
| | R811 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R812 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R813 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R814 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R817 | VE-30000880 | MF RES. | 1/4W 130K F |
| | R818 | VE-30012675 | SMD RES. | 1/16W 2K J |
| | R819 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R828 | VE-30000530 | CF RES. | 1/2W 15K J |
| | R829 | VE-30000530 | CF RES. | 1/2W 15K J |
| | R834 | VE-30001159 | MO RES. | 1W 0.33R J |
| | R836 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R839 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R842 | VE-30014128 | SMD RES. | 1/16W 33R J |
| | R844 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R845 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R846 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R847 | VE-30014128 | SMD RES. | 1/16W 33R J |
| | R848 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R849 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R851 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R852 | VE-30000650 | CF RES. | 1/4W 33R J |
| | R853 | VE-30012642 | SMD RES. | 1/16W 120K J |
| | R855 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R856 | VE-30012694 | SMD RES. | 1/16W 470K J |

### CAPACITOR

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| C141 | VE-30007081 | EL CAP. | 4.7UF 50V M (NPL) |
| C142 | VE-30007081 | EL CAP. | 4.7UF 50V M (NPL) |
| C143 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C144 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C145 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C146 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C147 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C148 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C149 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C150 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| C155 | VE-30012560 | SMD CAP. | 100PF 50V J |
| C157 | VE-30012560 | SMD CAP. | 100PF 50V J |
| C159 | VE-30000352 | EL CAP. | 100UF 16V M |

### CAPACITOR

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | C160 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C161 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C162 | VE-30012573 | SMD CAP. | 47PF 50V J |
| | C164 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | C165 | VE-30000413 | EL CAP. | 4.7UF 50V M |
| | C201 | VE-30000400 | EL CAP. | 47UF 50V M |
| | C205 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C206 | VE-30012610 | SMD CAP. | 10NF 50V J |
| | C207 | VE-30012610 | SMD CAP. | 10NF 50V J |
| | C230 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C246 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C303 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C305 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C310 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C333 | VE-30000083 | MKT CAP. | 150NF 63V J |
| | C363 | VE-30000083 | MKT CAP. | 150NF 63V J |
| | C364 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C366 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C368 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C404 | VE-30000190 | CER CAP. | 100PF 50V J CH |
| | C408 | VE-30012586 | SMD CAP. | 22NF 50V K |
| | C409 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C410 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C411 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C412 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C413 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C414 | VE-30012585 | SMD CAP. | 2.2NF 50V K R |
| | C415 | VE-30012581 | SMD CAP. | 1NF 50V K R |
| | C416 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C417 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C418 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C419 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C420 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C422 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C423 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C424 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C425 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C427 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C429 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C430 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C431 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C432 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C433 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C434 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C435 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C436 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C437 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C438 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C439 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C440 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C441 | VE-30012582 | SMD CAP. | 10NF 50V K R |
| | C442 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C443 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C444 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C446 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C448 | VE-30012586 | SMD CAP. | 22NF 50V K |
| | C449 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C453 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C455 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C457 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C459 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C501 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C502 | VE-30000400 | EL CAP. | 47UF 50V M |
| | C504 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C505 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C507 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C510 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C511 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C513 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C514 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C515 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C517 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C518 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C519 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C520 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C521 | VE-30012562 | SMD CAP. | 15PF 50V J |
| | C522 | VE-30012562 | SMD CAP. | 15PF 50V J |
| | C523 | VE-30012585 | SMD CAP. | 2.2NF 50V K R |
| | C524 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C525 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C526 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C527 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C529 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C530 | VE-30012589 | SMD CAP. | 4.7NF 50V K |

## [ AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP ]

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **CAPACITOR** | | | |
| | C532 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C536 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C541 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C542 | VE-30000107 | MKT CAP. | 47NF 250V J |
| | C543 | VE-30000431 | CER CAP. | 100PF 1KV M |
| | C544 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C547 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C565 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C566 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C567 | VE-30000431 | CER CAP. | 100PF 1KV M |
| | C602 | VE-30017319 | MKT CAP. | 120NF 63V J |
| | C604 | VE-30000356 | EL CAP. | 100UF 63V M |
| | C605 | VE-30000360 | EL CAP. | 1000UF 25V M |
| | C607 | VE-30012581 | SMD CAP. | 1NF 50V K R |
| ⚠ | C618 | VE-30000159 | MKP CAP. | 4.7NF 1.6KV J |
| ⚠ | C621 | VE-30000179 | MKP CAP. | 9.1NF 1600V ϕ3.5 |
| | C622 | VE-30000121 | KP CAP. | 27NF 630V J |
| ⚠ | C625 | VE-30000156 | MKP CAP. | 430NF 250V J |
| | C627 | VE-30000167 | MKP CAP. | 560NF 250V J |
| | C629 | VE-30000177 | MKP CAP. | 820NF 250V J |
| | C632 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C635 | VE-30000385 | EL CAP. | 2.2UF 250V M |
| | C636 | VE-30000387 | EL CAP. | 33UF 50V M |
| | C640 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C641 | VE-30000090 | MKT CAP. | 22NF 100V J |
| | C642 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C644 | VE-30000409 | EL CAP. | 470UF 25V M |
| | C645 | VE-30000090 | MKT CAP. | 22NF 100V J |
| | C646 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C647 | VE-30007748 | EL CAP. | 1000UF 35V M |
| | C648 | VE-30000394 | EL CAP. | 3.3UF 160V M |
| | C649 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C652 | VE-30000330 | CER CAP. | 4.7NF 50V K B |
| | C653 | VE-30000107 | MKT CAP. | 47NF 250V J |
| | C655 | VE-30000415 | EL CAP. | 4.7UF 250V M |
| | C700 | VE-30012565 | SMD CAP. | 1.8PF 50V J CH |
| | C701 | VE-30012565 | SMD CAP. | 1.8PF 50V J CH |
| | C702 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C703 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C704 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C705 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C706 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C708 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C712 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C713 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C714 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C716 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C717 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C718 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C719 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C720 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C721 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C723 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C724 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C729 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C730 | VE-30000393 | EL CAP. | 3.3UF 50V M |
| | C733 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C734 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C735 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C736 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C737 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C738 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C739 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C740 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C741 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C742 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C745 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| ⚠ | C801 | VE-30000094 | MKT CAP. | 220NF 275V MAC |
| ⚠ | C802 | VE-30000094 | MKT CAP. | 220NF 275V MAC |
| ⚠ | C803 | VE-30000433 | CER CAP. | 1NF 1KV M B |
| ⚠ | C804 | VE-30000433 | CER CAP. | 1NF 1KV M B |
| | C808 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C809 | VE-30000420 | EL CAP. | 150UF 400V M |
| | C810 | VE-30000387 | EL CAP. | 33UF 50V M |
| | C811 | VE-30000161 | MKP CAP. | 47NF 630V J |
| | C812 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| ⚠ | C816 | VE-30000440 | CER CAP. | 2.2NF 4KV M |
| | C817 | VE-30000198 | CER CAP. | 120PF 500V J SL |
| | C818 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C819 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C822 | VE-30007308 | CER CAP. | 220PF 1KV K (PULSE) |
| | C826 | VE-30000406 | EL CAP. | 47UF 250V M (HR) |
| | C827 | VE-30000411 | EL CAP. | 4700UF 16V M |
| | C828 | VE-30012590 | SMD CAP. | 47NF 50V K |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **CAPACITOR** | | | |
| | C829 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C830 | VE-30000383 | EL CAP. | 2200UF 25V M |
| | C832 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C833 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C834 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C835 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C838 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C839 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C840 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C848 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C850 | VE-30000383 | EL CAP. | 2200UF 25V M |
| | C851 | VE-30012590 | SMD CAP. | 47NF 50V K |
| ⚠ | C852 | VE-30000440 | CER CAP. | 2.2NF 4KV M |
| | C857 | VE-30000106 | MKT CAP. | 47NF 100V J |
| | C858 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| | C859 | VE-30009208 | CER CAP. | 470PF 1KV K (PULSE) |
| | C860 | VE-30000296 | CER CAP. | 100NF 100V Z F |
| | C872 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| | **TRANSF** | | | |
| | TR600 | VE-30002090 | LINE DRIVER | |
| ⚠ | TR601 | VE-30017522 | FBT TRF | |
| ⚠ | TR802 | VE-30018785 | SMPS TRF | |
| | **COIL** | | | |
| | L101 | VE-30001971 | FERRITE BEAT | |
| | L102 | VE-30001971 | FERRITE BEAT | |
| | L106 | VE-30001971 | FERRITE BEAT | |
| | L108 | VE-30001971 | FERRITE BEAT | |
| | L109 | VE-30001971 | FERRITE BEAT | |
| | L110 | VE-30001971 | FERRITE BEAT | |
| | L111 | VE-30001971 | FERRITE BEAT | |
| | L112 | VE-30001971 | FERRITE BEAT | |
| | L113 | VE-30001971 | FERRITE BEAT | |
| | L114 | VE-30001971 | FERRITE BEAT | |
| | L115 | VE-30001971 | FERRITE BEAT | |
| | L116 | VE-30001971 | FERRITE BEAT | |
| | L117 | VE-30001971 | FERRITE BEAT | |
| | L201 | VE-30001979 | FIXED COIL | 1UH |
| | L210 | VE-30001971 | FERRITE BEAT | |
| | L215 | VE-30001971 | FERRITE BEAT | |
| | L401 | VE-30001971 | FERRITE BEAT | |
| | L402 | VE-30001992 | FIXED COIL | 10UH |
| | L403 | VE-30001971 | FERRITE BEAT | |
| | L404 | VE-30001990 | FIXED COIL | 6.8UH |
| | L405 | VE-30014048 | ADJ. COIL | 44MHZ |
| | L406 | VE-30001971 | FERRITE BEAT | |
| | L407 | VE-30001992 | FIXED COIL | 10UH |
| | L408 | VE-30001992 | FIXED COIL | 10UH |
| | L501 | VE-30001971 | FERRITE BEAT | |
| | L502 | VE-30001971 | FERRITE BEAT | |
| | L503 | VE-30001971 | FERRITE BEAT | |
| | L504 | VE-30001971 | FERRITE BEAT | |
| | L600 | VE-30002031 | FIXED COIL | 15MH |
| | L602 | VE-30002156 | LINEARITY COIL | 30UH |
| | L603 | VE-30002026 | FIXED COIL | 1MH |
| | L700 | VE-30001971 | FERRITE BEAT | |
| | L701 | VE-30001971 | FERRITE BEAT | |
| | L702 | VE-30001992 | FIXED COIL | 10UH |
| | L703 | VE-30001971 | FERRITE BEAT | |
| | L704 | VE-30001971 | FERRITE BEAT | |
| | L801 | VE-30002011 | CHOKE COIL | 150UH |
| | L803 | VE-30001992 | FIXED COIL | 10UH |
| | **DIODE** | | | |
| | D105 | VE-30007760 | ZENER DIODE | |
| | D106 | VE-30007760 | ZENER DIODE | |
| | D107 | VE-30007760 | ZENER DIODE | |
| | D303 | VE-30001329 | DIODE | |
| | D402 | VE-30012411 | DIODE | |
| | D405 | VE-30007763 | ZENER DIODE | |
| | D407 | VE-30001284 | DIODE | |
| | D408 | VE-30001285 | DIODE | |
| | D409 | VE-30001284 | DIODE | |
| | D413 | VE-30018526 | ZENER DIODE | |
| | D501 | VE-30001285 | DIODE | |
| | D505 | VE-30001285 | DIODE | |
| | D506 | VE-30001284 | DIODE | |

## [ AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP ]

### DIODE

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | D512 | VE-30001285 | DIODE | |
| | D513 | VE-30001369 | ZENER DIODE | |
| | D533 | VE-30001377 | ZENER DIODE | |
| | D601 | VE-30001329 | DIODE | |
| | D603 | VE-30001285 | DIODE | |
| | D605 | VE-30001320 | DIODE | |
| | D606 | VE-30001323 | DIODE | |
| | D609 | VE-30001318 | DIODE | |
| | D610 | VE-30001318 | DIODE | |
| | D613 | VE-30001318 | DIODE | |
| | D614 | VE-30001285 | DIODE | |
| | D616 | VE-30003696 | DIODE | |
| | D617 | VE-30001318 | DIODE | |
| | D651 | VE-30001285 | DIODE | |
| | D653 | VE-30001285 | DIODE | |
| | D656 | VE-30007763 | ZENER DIODE | |
| | D657 | VE-30007763 | ZENER DIODE | |
| | D658 | VE-30007763 | ZENER DIODE | |
| | D659 | VE-30001350 | ZENER DIODE | |
| | D660 | VE-30001347 | ZENER DIODE | |
| | D661 | VE-30001350 | ZENER DIODE | |
| | D700 | VE-30001285 | DIODE | |
| | D701 | VE-30001369 | ZENER DIODE | |
| | D800 | VE-30001318 | DIODE | |
| | D801 | VE-30001372 | ZENER DIODE | |
| | D802 | VE-30001318 | DIODE | |
| | D803 | VE-30001315 | DIODE | |
| | D804 | VE-30001318 | DIODE | |
| | D805 | VE-30001315 | DIODE | |
| | D806 | VE-30001315 | DIODE | |
| | D808 | VE-20092405 | CN.ASY | |
| | D809 | VE-30001329 | DIODE | |
| | D810 | VE-30009366 | DIODE | |
| | D811 | VE-30009366 | DIODE | |
| | D812 | VE-30001285 | DIODE | |
| | D889 | VE-30001384 | TR | |
| ⚠ | D891 | VE-30007758 | BRIDGE DIODE | |
| | D892 | VE-30001318 | DIODE | |
| | D893 | VE-30001318 | DIODE | |
| | D894 | VE-30001285 | DIODE | |
| | D897 | VE-30001329 | DIODE | |

### TRANSISTOR

| | | | | |
|---|---|---|---|---|
| | Q104 | VE-30001457 | TR | |
| | Q106 | VE-30001457 | TR | |
| | Q141 | VE-30001457 | TR | |
| | Q142 | VE-30001457 | TR | |
| | Q307 | VE-30001457 | TR | |
| | Q316 | VE-30001458 | TR | |
| | Q402 | VE-30001457 | TR | |
| | Q403 | VE-30001457 | TR | |
| | Q404 | VE-30001457 | TR | |
| | Q503 | VE-30001457 | TR | |
| | Q504 | VE-30001458 | TR | |
| | Q600 | VE-30001435 | TR | |
| ⚠ | Q601 | VE-30001441 | TR | |
| | Q602 | VE-30001429 | TR | |
| | Q603 | VE-30001458 | TR | |
| | Q604 | VE-30001457 | TR | |
| | Q605 | VE-30001458 | TR | |
| | Q700 | VE-30001458 | TR | |
| | Q801 | VE-30001386 | TR | |
| | Q802 | VE-30001457 | TR | |
| | Q804 | VE-30001454 | TR | |

### IC

| | | | | |
|---|---|---|---|---|
| | IC301 | VE-30016113 | IC | |
| | IC403 | VE-30014510 | IC | |
| | IC500 | VE-20099534 | IC | (SERVICE) |
| | IC501 | VE-20093395 | IC | (MICOM) |
| | IC601 | VE-30013985 | IC | |
| | IC700 | VE-30013658 | IC | |
| | IC800 | VE-30011968 | IC | |
| ⚠ | IC801 | VE-30015087 | IC | |
| | IC802 | VE-30001622 | IC | |
| | IC803 | VE-30001500 | IC | |
| | IC804 | VE-30001622 | IC | |
| | IC818 | VE-30001506 | IC | |

### OTHERS

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| ⚠ | TR801 | VE-30002104 | LINE FILTER | |
| ⚠ | F801 | VE-30001731 | FUSE | 2.5A |
| ⚠ | TH800 | VE-30001270 | PTC | 9 OHM |
| | TU201 | VE-30009637 | TUNER | |
| | VR800 | VE-30001064 | RES ADJ | |
| | X401 | VE-30001749 | XTAL | |
| | X402 | VE-30015592 | XTAL | |
| | X501 | VE-30002851 | XTAL | |
| | X700 | VE-30001756 | XTAL | |
| | Z401 | VE-30012545 | SAW FILTER | |
| | Z402 | VE-30014261 | SAW FILTER | |
| | Z404 | VE-30001724 | SER FILTER | |

### CRT SOCKET P.W. BOARD ASS'Y (VE-20094670)

Refer to PARTS LIST in page 30 for this P.W . board

### FRONT CONTROL P.W. BOARD ASS'Y (VE-20082481)

Refer to PARTS LIST in page 30 for this P.W . board

### FRONT AV & HEADPHONE P.W. BOARD ASS'Y (VE-20083646)

Refer to PARTS LIST in page 30 for this P.W . board

# PRINTED WIRING BOARD PARTS LIST

## [ AV-28BT8EES / AV-28BT8EEB ]

### MAIN P.W. BOARD ASS'Y (VE-20101622)

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R102 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R103 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R106 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R107 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R109 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R110 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R111 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R113 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R114 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R115 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R117 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R118 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R121 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R122 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R123 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R124 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R126 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R129 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R135 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R137 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R138 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R139 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R141 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R145 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R149 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R151 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R152 | VE-30000752 | CF RES. | 1/4W 56K J |
| | R153 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R154 | VE-30000723 | CF RES. | 1/4W 47K J |
| | R155 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R169 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R171 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R172 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R174 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R175 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R176 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R201 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R202 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R204 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R206 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R319 | VE-30014076 | SMD RES. | 1/16W 4.7R J |
| | R320 | VE-30014076 | SMD RES. | 1/16W 4.7R J |
| | R324 | VE-30012667 | SMD RES. | 1/16W 220K J |
| | R328 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R329 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R332 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R333 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R338 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R340 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R341 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R343 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R370 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R371 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R391 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R417 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R418 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R419 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R420 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R421 | VE-30012650 | SMD RES. | 1/16W 15K J |
| | R422 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R423 | VE-30012712 | SMD RES. | 1/16W 8.2K J |
| | R425 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R426 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R427 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R428 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R430 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R431 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R432 | VE-30012707 | SMD RES. | 1/16W 680R J |
| | R433 | VE-30012683 | SMD RES. | 1/16W 330K J |
| | R437 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R438 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R439 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R440 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R441 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R442 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R446 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R447 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R448 | VE-30012683 | SMD RES. | 1/16W 330K J |
| | R449 | VE-30012659 | SMD RES. | 1/16W 2.2K J |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R450 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R458 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R459 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R460 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R461 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R462 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R467 | VE-30000670 | CF RES. | 1/4W 330K J |
| | R468 | VE-30000670 | CF RES. | 1/4W 330K J |
| | R469 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R471 | VE-30014022 | SMD RES. | 1/16W 47R J |
| | R472 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R474 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R481 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R482 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R483 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R485 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R486 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R487 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R507 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R508 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R509 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R510 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R511 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R512 | VE-30000495 | CF RES. | 1/4W 1.2K J |
| | R513 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R514 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R515 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R516 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R517 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R518 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R519 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R525 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R526 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R527 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R528 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R529 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R530 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R532 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R533 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R534 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R537 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R538 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R539 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R540 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R545 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R548 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R554 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R555 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R556 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R560 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R561 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R568 | VE-30000594 | CF RES. | 1/4W 22K J |
| | R572 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R573 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R574 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R603 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R604 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R606 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R607 | VE-30000554 | CF RES. | 1/4W 180R J |
| | R608 | VE-30000859 | MF RES. | 1/2W 1R F |
| | R609 | VE-30000711 | CF RES. | 1/2W 470R J |
| | R610 | VE-30000599 | CF RES. | 1/4W 220K J |
| | R611 | VE-30012708 | SMD RES. | 1/16W 68K J |
| | R614 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R616 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R617 | VE-30000572 | CF RES. | 1/4W 2K J |
| | R630 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R634 | VE-30000633 | CF RES. | 1/4W 27K J |
| | R639 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R640 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R646 | VE-30000531 | CF RES. | 1/4W 15K J |
| | R647 | VE-30000466 | CF RES. | 1/4W 1K J |
| ⚠ | R648 | VE-30001246 | FUSE RES. | 1W 0.47R J |
| | R650 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R651 | VE-30012668 | SMD RES. | 1/16W 220R J |
| ⚠ | R656 | VE-30001230 | FUSE RES. | 1/2W 27R J |
| ⚠ | R657 | VE-30001228 | FUSE RES. | 1/2W 2.2R J |
| | R662 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R666 | VE-30000815 | CF RES. | 1/4W 8.2K J |

## [ AV-28BT8EES / AV-28BT8EEB ]

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | | **RESISTOR** | | |
| | R668 | VE-30000790 | CF RES. | 1/4W 6.8R J |
| | R669 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R670 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R674 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| ⚠ | R675 | VE-30001244 | FUSE RES. | 1/2W 0.47R J |
| | R677 | VE-30001124 | MO RES. | 3W 220R J |
| | R678 | VE-30014022 | SMD RES. | 1/16W 47R J |
| | R680 | VE-30000477 | CF RES. | 1/4W 100K J |
| | R681 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R682 | VE-30008856 | MO RES. | 2W 270R J |
| | R683 | VE-30017083 | WW RES. | 5W 2.2K J RAD. |
| | R689 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R690 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R691 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R692 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R693 | VE-30012708 | SMD RES. | 1/16W 68K J |
| | R694 | VE-30000689 | CF RES. | 1/4W 3.9K J |
| | R695 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R696-Y | VE-30001350 | ZENER DIODE | 12V |
| | R697 | VE-30000712 | CF RES. | 1/4W 470R J |
| | R698 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R699 | VE-30012685 | SMD RES. | 1/16W 33K J |
| | R700 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R701 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R703 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R705 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R715 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R717 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R719 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R721 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R722 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R723 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R724 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R801 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R803 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R805 | VE-30000650 | CF RES. | 1/4W 33R J |
| | R806 | VE-30000982 | MF RES. | 1/4W 4.7K J |
| | R807 | VE-30001173 | MO RES. | 1W 0.47R J |
| | R809 | VE-30007784 | MO RES. | 5W 33K J(RADIAL) |
| ⚠ | R810 | VE-30001257 | MG RES. | 1/2W 4.7M J |
| | R811 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R812 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R813 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R814 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R817 | VE-30000880 | MF RES. | 1/4W 130K F |
| | R818 | VE-30012675 | SMD RES. | 1/16W 2K J |
| | R819 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R828 | VE-30000530 | CF RES. | 1/2W 15K J |
| | R829 | VE-30000530 | CF RES. | 1/2W 15K J |
| | R834 | VE-30001159 | MO RES. | 1W 0.33R J |
| | R836 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R839 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R842 | VE-30014128 | SMD RES. | 1/16W 33R J |
| | R844 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R845 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R846 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R847 | VE-30014128 | SMD RES. | 1/16W 33R J |
| | R848 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R849 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R851 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R852 | VE-30000650 | CF RES. | 1/4W 33R J |
| | R853 | VE-30012642 | SMD RES. | 1/16W 120K J |
| | R855 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R856 | VE-30012694 | SMD RES. | 1/16W 470K J |
| | | **CAPACITOR** | | |
| | C141 | VE-30007081 | EL CAP. | 4.7UF 50V M (NPL) |
| | C142 | VE-30007081 | EL CAP. | 4.7UF 50V M (NPL) |
| | C143 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C144 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C145 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C146 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C147 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C148 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C149 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C150 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C155 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C157 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C159 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C160 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C161 | VE-30000345 | EL CAP. | 10UF 50V M |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | | **CAPACITOR** | | |
| | C162 | VE-30012573 | SMD CAP. | 47PF 50V J |
| | C164 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | C165 | VE-30000413 | EL CAP. | 4.7UF 50V M |
| | C201 | VE-30000400 | EL CAP. | 47UF 50V M |
| | C205 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C206 | VE-30012610 | SMD CAP. | 10NF 50V J |
| | C207 | VE-30012610 | SMD CAP. | 10NF 50V J |
| | C230 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C246 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C303 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C305 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C310 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C333 | VE-30000083 | MKT CAP. | 150NF 63V J |
| | C363 | VE-30000083 | MKT CAP. | 150NF 63V J |
| | C364 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C366 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C368 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C404 | VE-30000190 | CER CAP. | 100PF 50V J CH |
| | C408 | VE-30012586 | SMD CAP. | 22NF 50V K |
| | C409 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C410 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C411 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C412 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C413 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C414 | VE-30012585 | SMD CAP. | 2.2NF 50V K R |
| | C415 | VE-30012581 | SMD CAP. | 1NF 50V K R |
| | C416 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C417 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C418 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C419 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C420 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C422 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C423 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C424 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C425 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C427 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C429 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C430 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C431 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C432 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C433 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C434 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C435 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C436 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C437 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C438 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C439 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C440 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C441 | VE-30012582 | SMD CAP. | 10NF 50V K R |
| | C442 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C443 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C444 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C448 | VE-30012586 | SMD CAP. | 22NF 50V K |
| | C449 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C453 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C455 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C459 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C501 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C502 | VE-30000400 | EL CAP. | 47UF 50V M |
| | C504 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C505 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C507 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C510 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C511 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C513 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C514 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C515 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C517 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C518 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C519 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C520 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C521 | VE-30012562 | SMD CAP. | 15PF 50V J |
| | C522 | VE-30012562 | SMD CAP. | 15PF 50V J |
| | C523 | VE-30012585 | SMD CAP. | 2.2NF 50V K R |
| | C524 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C525 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C526 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C527 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C529 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C530 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C532 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C536 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C541 | VE-30000362 | EL CAP. | 1UF 50V M |

## [ AV-28BT8EES / AV-28BT8EEB ]

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **CAPACITOR** | | | |
| | C542 | VE-30000107 | MKT CAP. | 47NF 250V J |
| | C543 | VE-30000431 | CER CAP. | 100PF 1KV M |
| | C544 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C547 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C565 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C566 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C567 | VE-30000431 | CER CAP. | 100PF 1KV M |
| | C602 | VE-30017319 | MKT CAP. | 120NF 63V J |
| | C604 | VE-30000356 | EL CAP. | 100UF 63V M |
| | C605 | VE-30000360 | EL CAP. | 1000UF 25V M |
| | C607 | VE-30012581 | SMD CAP. | 1NF 50V K R |
| ⚠ | C618 | VE-30000159 | MKP CAP. | 4.7NF 1.6KV J |
| ⚠ | C621 | VE-30000179 | MKP CAP. | 9.1NF 1600V 933.5 |
| | C622 | VE-30000121 | KP CAP. | 27NF 630V J |
| ⚠ | C625 | VE-30000156 | MKP CAP. | 430NF 250V J |
| | C627 | VE-30000167 | MKP CAP. | 560NF 250V J |
| | C629 | VE-30000177 | MKP CAP. | 820NF 250V J |
| | C632 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C635 | VE-30000385 | EL CAP. | 2.2UF 250V M |
| | C636 | VE-30000387 | EL CAP. | 33UF 50V M |
| | C640 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C641 | VE-30000090 | MKT CAP. | 22NF 100V J |
| | C642 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C644 | VE-30000409 | EL CAP. | 470UF 25V M |
| | C645 | VE-30000090 | MKT CAP. | 22NF 100V J |
| | C646 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C647 | VE-30007748 | EL CAP. | 1000UF 35V M |
| | C648 | VE-30000394 | EL CAP. | 3.3UF 160V M |
| | C649 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C652 | VE-30000330 | CER CAP. | 4.7NF 50V K B |
| | C653 | VE-30000107 | MKT CAP. | 47NF 250V J |
| | C655 | VE-30000415 | EL CAP. | 4.7UF 250V M |
| | C700 | VE-30012565 | SMD CAP. | 1.8PF 50V J CH |
| | C701 | VE-30012565 | SMD CAP. | 1.8PF 50V J CH |
| | C702 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C703 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C704 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C705 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C706 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C708 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C712 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C713 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C714 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C716 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C717 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C718 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C719 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C720 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C721 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C723 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C724 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C729 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C730 | VE-30000393 | EL CAP. | 3.3UF 50V M |
| | C733 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C734 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C735 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C736 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C737 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C738 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C739 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C740 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C741 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C742 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C745 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| ⚠ | C801 | VE-30000094 | MKT CAP. | 220NF 275V M AC |
| ⚠ | C802 | VE-30000094 | MKT CAP. | 220NF 275V M AC |
| ⚠ | C803 | VE-30000433 | CER CAP. | 1NF 1KV M B |
| ⚠ | C804 | VE-30000433 | CER CAP. | 1NF 1KV M B |
| | C808 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C809 | VE-30000420 | EL CAP. | 150UF 400V M |
| | C810 | VE-30000387 | EL CAP. | 33UF 50V M |
| | C811 | VE-30000161 | MKP CAP. | 47NF 630V J |
| | C812 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| ⚠ | C816 | VE-30000440 | CER CAP. | 2.2NF 4KV M |
| | C817 | VE-30000198 | CER CAP. | 120PF 500V J SL |
| | C818 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C819 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C822 | VE-30007308 | CER CAP. | 220PF 1KV K (PULSE) |
| | C826 | VE-30000406 | EL CAP. | 47UF 250V M (HR) |
| | C827 | VE-30000411 | EL CAP. | 4700UF 16V M |
| | C828 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C829 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C830 | VE-30000383 | EL CAP. | 2200UF 25V M |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **CAPACITOR** | | | |
| | C832 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C833 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C834 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C835 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C838 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C839 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C840 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C848 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C850 | VE-30000383 | EL CAP. | 2200UF 25V M |
| | C851 | VE-30012590 | SMD CAP. | 47NF 50V K |
| ⚠ | C852 | VE-30000440 | CER CAP. | 2.2NF 4KV M |
| | C857 | VE-30000106 | MKT CAP. | 47NF 100V J |
| | C858 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| | C859 | VE-30009208 | CER CAP. | 470PF 1KV K (PULSE) |
| | C860 | VE-30000296 | CER CAP. | 100NF 100V Z F |
| | C872 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| | **TRANSF** | | | |
| | TR600 | VE-30002090 | LINE DRIVER | |
| ⚠ | TR601 | VE-30017522 | FBT TRF | |
| ⚠ | TR802 | VE-30018785 | SMPS TRF | |
| | **COIL** | | | |
| | L101 | VE-30001971 | FERRITE BEAT | |
| | L102 | VE-30001971 | FERRITE BEAT | |
| | L106 | VE-30001971 | FERRITE BEAT | |
| | L108 | VE-30001971 | FERRITE BEAT | |
| | L109 | VE-30001971 | FERRITE BEAT | |
| | L110 | VE-30001971 | FERRITE BEAT | |
| | L111 | VE-30001971 | FERRITE BEAT | |
| | L112 | VE-30001971 | FERRITE BEAT | |
| | L113 | VE-30001971 | FERRITE BEAT | |
| | L114 | VE-30001971 | FERRITE BEAT | |
| | L115 | VE-30001971 | FERRITE BEAT | |
| | L116 | VE-30001971 | FERRITE BEAT | |
| | L117 | VE-30001971 | FERRITE BEAT | |
| | L201 | VE-30001979 | FIXED COIL | 1UH |
| | L210 | VE-30001971 | FERRITE BEAT | |
| | L215 | VE-30001971 | FERRITE BEAT | |
| | L401 | VE-30001971 | FERRITE BEAT | |
| | L402 | VE-30001992 | FIXED COIL | 10UH |
| | L403 | VE-30001971 | FERRITE BEAT | |
| | L404 | VE-30001990 | FIXED COIL | 6.8UH Q75 K |
| | L405 | VE-30014048 | ADJ. COIL | 44MHZ |
| | L406 | VE-30001971 | FERRITE BEAT | |
| | L408 | VE-30001992 | FIXED COIL | 10UH |
| | L501 | VE-30001971 | FERRITE BEAT | |
| | L502 | VE-30001971 | FERRITE BEAT | |
| | L503 | VE-30001971 | FERRITE BEAT | |
| | L504 | VE-30001971 | FERRITE BEAT | |
| | L600 | VE-30002031 | FIXED COIL | 15MH |
| | L602 | VE-30002156 | LINEARITY COIL | 30UH |
| | L603 | VE-30002026 | FIXED COIL | 1MH |
| | L700 | VE-30001971 | FERRITE BEAT | |
| | L701 | VE-30001971 | FERRITE BEAT | |
| | L702 | VE-30001992 | FIXED COIL | 10UH |
| | L703 | VE-30001971 | FERRITE BEAT | |
| | L704 | VE-30001971 | FERRITE BEAT | |
| | L801 | VE-30002011 | CHOKE COIL | 150UH |
| | L803 | VE-30001992 | FIXED COIL | 10UH |
| | **DIODE** | | | |
| | D105 | VE-30007760 | ZENER DIODE | |
| | D106 | VE-30007760 | ZENER DIODE | |
| | D107 | VE-30007760 | ZENER DIODE | |
| | D303 | VE-30001329 | DIODE | |
| | D405 | VE-30007763 | ZENER DIODE | |
| | D407 | VE-30001284 | DIODE | |
| | D408 | VE-30001285 | DIODE | |
| | D409 | VE-30001284 | DIODE | |
| | D413 | VE-30018526 | ZENER DIODE | |
| | D501 | VE-30001285 | DIODE | |
| | D505 | VE-30001285 | DIODE | |
| | D506 | VE-30001284 | DIODE | |
| | D512 | VE-30001285 | DIODE | |
| | D513 | VE-30001369 | ZENER DIODE | |
| | D533 | VE-30001377 | ZENER DIODE | |

## [ AV-28BT8EES / AV-28BT8EEB ]

### DIODE

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | D601 | VE-30001329 | DIODE | |
| | D603 | VE-30001285 | DIODE | |
| | D605 | VE-30001320 | DIODE | |
| | D606 | VE-30001323 | DIODE | |
| | D609 | VE-30001318 | DIODE | |
| | D610 | VE-30001318 | DIODE | |
| | D613 | VE-30001318 | DIODE | |
| | D614 | VE-30001285 | DIODE | |
| | D616 | VE-30003696 | DIODE | |
| | D617 | VE-30001318 | DIODE | |
| | D651 | VE-30001285 | DIODE | |
| | D653 | VE-30001285 | DIODE | |
| | D656 | VE-30007763 | ZENER DIODE | |
| | D657 | VE-30007763 | ZENER DIODE | |
| | D658 | VE-30007763 | ZENER DIODE | |
| | D659 | VE-30001350 | ZENER DIODE | |
| | D660 | VE-30001347 | ZENER DIODE | |
| | D661 | VE-30001350 | ZENER DIODE | |
| | D700 | VE-30001285 | DIODE | |
| | D701 | VE-30001369 | ZENER DIODE | |
| | D800 | VE-30001318 | DIODE | |
| | D801 | VE-30001372 | ZENER DIODE | |
| | D802 | VE-30001318 | DIODE | |
| | D803 | VE-30001315 | DIODE | |
| | D804 | VE-30001318 | DIODE | |
| | D805 | VE-30001315 | DIODE | |
| | D806 | VE-30001315 | DIODE | |
| | D808 | VE-20092405 | CN.ASY | |
| | D809 | VE-30001329 | DIODE | |
| | D810 | VE-30009366 | DIODE | |
| | D811 | VE-30009366 | DIODE | |
| | D812 | VE-30001285 | DIODE | |
| | D889 | VE-30001384 | TR | |
| ⚠ | D891 | VE-30007758 | BRIDGE DIODE | |
| | D892 | VE-30001318 | DIODE | |
| | D893 | VE-30001318 | DIODE | |
| | D894 | VE-30001285 | DIODE | |
| | D897 | VE-30001329 | DIODE | |

### TRANSISTOR

| | | | | |
|---|---|---|---|---|
| | Q104 | VE-30001457 | TR | |
| | Q106 | VE-30001457 | TR | |
| | Q141 | VE-30001457 | TR | |
| | Q142 | VE-30001457 | TR | |
| | Q307 | VE-30001457 | TR | |
| | Q316 | VE-30001458 | TR | |
| | Q403 | VE-30001457 | TR | |
| | Q404 | VE-30001457 | TR | |
| | Q503 | VE-30001457 | TR | |
| | Q504 | VE-30001458 | TR | |
| | Q600 | VE-30001435 | TR | |
| ⚠ | Q601 | VE-30001441 | TR | H.OUT |
| | Q602 | VE-30001429 | TR | |
| | Q603 | VE-30001458 | TR | |
| | Q604 | VE-30001457 | TR | |
| | Q605 | VE-30001458 | TR | |
| | Q700 | VE-30001458 | TR | |
| | Q801 | VE-30001386 | TR | |
| | Q802 | VE-30001457 | TR | |
| | Q804 | VE-30001454 | TR | |

### IC

| | | | | |
|---|---|---|---|---|
| | IC301 | VE-30016113 | IC | |
| | IC403 | VE-30014510 | IC | |
| | IC500 | VE-20101623 | IC | (SERVICE) |
| | IC501 | VE-20093395 | IC | (MICOM) |
| | IC601 | VE-30013985 | IC | |
| | IC700 | VE-30013658 | IC | |
| | IC800 | VE-30011968 | IC | |
| ⚠ | IC801 | VE-30015087 | IC | |
| | IC802 | VE-30001622 | IC | |
| | IC803 | VE-30001500 | IC | |
| | IC804 | VE-30001622 | IC | |
| | IC818 | VE-30001506 | IC | |

### OTHERS

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| ⚠ | TR801 | VE-30002104 | LINE FILTER | |
| ⚠ | F801 | VE-30001731 | FUSE | 2.5A |
| ⚠ | TH800 | VE-30001270 | PTC | 9 OHM |
| | TU201 | VE-30009637 | TUNER | |
| | VR800 | VE-30001064 | RES ADJ | |
| | X401 | VE-30001749 | XTAL | |
| | X402 | VE-30015592 | XTAL | |
| | X501 | VE-30002851 | XTAL | |
| | X700 | VE-30001756 | XTAL | |
| | Z401 | VE-30013163 | SAW FILTER | |
| | Z402 | VE-30014261 | SAW FILTER | |
| | Z404 | VE-30001724 | SER FILTER | |

### CRT SOCKET P.W. BOARD ASS'Y (VE-20094670)

Refer to PARTS LIST in page 30 for this P.W . board

### FRONT CONTROL P.W. BOARD ASS'Y (VE-20082481)

Refer to PARTS LIST in page 30 for this P.W . board

### FRONT AV & HEADPHONE P.W. BOARD ASS'Y (VE-20083646)

Refer to PARTS LIST in page 30 for this P.W . board

# PRINTED WIRING BOARD PARTS LIST

## [ AV-28BS88EN ]

### MAIN P.W. BOARD ASS'Y (VE-20101578)

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R102 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R103 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R106 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R107 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R109 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R110 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R111 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R113 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R114 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R115 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R117 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R118 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R121 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R122 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R123 | VE-30000792 | CF RES. | 1/4W 75R J |
| | R124 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R126 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R129 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R135 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R137 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R138 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R139 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R141 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R145 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R149 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R151 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R152 | VE-30000752 | CF RES. | 1/4W 56K J |
| | R153 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R154 | VE-30000723 | CF RES. | 1/4W 47K J |
| | R155 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R169 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R171 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R172 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R174 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R175 | VE-30012713 | SMD RES. | 1/16W 75R J |
| | R176 | VE-30012703 | SMD RES. | 1/16W 56K J |
| | R201 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R202 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R204 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R206 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R319 | VE-30014076 | SMD RES. | 1/16W 4.7R J |
| | R320 | VE-30014076 | SMD RES. | 1/16W 4.7R J |
| | R324 | VE-30012667 | SMD RES. | 1/16W 220K J |
| | R328 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R329 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R332 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R333 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R338 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R340 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R341 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R343 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R370 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R371 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R391 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R417 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R418 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R419 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R420 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R421 | VE-30012650 | SMD RES. | 1/16W 15K J |
| | R422 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R423 | VE-30012712 | SMD RES. | 1/16W 8.2K J |
| | R425 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R426 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R427 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R428 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R430 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R431 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R432 | VE-30012707 | SMD RES. | 1/16W 680R J |
| | R433 | VE-30012683 | SMD RES. | 1/16W 330K J |
| | R437 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R438 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R439 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R440 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R441 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R442 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R446 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R447 | VE-30012714 | SMD RES. | 1/16W 820R J |
| | R448 | VE-30012683 | SMD RES. | 1/16W 330K J |
| | R449 | VE-30012659 | SMD RES. | 1/16W 2.2K J |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R450 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R458 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R459 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R460 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R461 | VE-30012668 | SMD RES. | 1/16W 220R J |
| | R462 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R467 | VE-30000670 | CF RES. | 1/4W 330K J |
| | R468 | VE-30000670 | CF RES. | 1/4W 330K J |
| | R469 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R471 | VE-30014022 | SMD RES. | 1/16W 47R J |
| | R472 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R474 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R481 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R482 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R483 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R485 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R486 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R487 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R507 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R508 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R509 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R510 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R511 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R512 | VE-30000495 | CF RES. | 1/4W 1.2K J |
| | R513 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R514 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R515 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R516 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R517 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R518 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R519 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R525 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R526 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R527 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R528 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R529 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R530 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R532 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R533 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R534 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R537 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R538 | VE-30012698 | SMD RES. | 1/16W 5.6K J |
| | R539 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R540 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R545 | VE-30012644 | SMD RES. | 1/16W 12K J |
| | R548 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R554 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R555 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R556 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R560 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R561 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R568 | VE-30000594 | CF RES. | 1/4W 22K J |
| | R572 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R573 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R574 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R603 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R604 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R606 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R607 | VE-30000554 | CF RES. | 1/4W 180R J |
| | R608 | VE-30000859 | MF RES. | 1/2W 1R F |
| | R609 | VE-30000711 | CF RES. | 1/2W 470R J |
| | R610 | VE-30000599 | CF RES. | 1/4W 220K J |
| | R611 | VE-30012708 | SMD RES. | 1/16W 68K J |
| | R614 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R616 | VE-30012669 | SMD RES. | 1/16W 22K J |
| | R617 | VE-30000572 | CF RES. | 1/4W 2K J |
| | R630 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R634 | VE-30000633 | CF RES. | 1/4W 27K J |
| | R639 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R640 | VE-30000628 | CF RES. | 1/4W 2.7K J |
| | R646 | VE-30000531 | CF RES. | 1/4W 15K J |
| | R647 | VE-30000466 | CF RES. | 1/4W 1K J |
| ⚠ | R648 | VE-30001246 | FUSE RES. | 1W 0.47R J |
| | R650 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R651 | VE-30012668 | SMD RES. | 1/16W 220R J |
| ⚠ | R656 | VE-30001230 | FUSE RES. | 1/2W 27R J |
| ⚠ | R657 | VE-30001228 | FUSE RES. | 1/2W 2.2R J |
| | R662 | VE-30012674 | SMD RES. | 1/16W 27K J |
| | R666 | VE-30000815 | CF RES. | 1/4W 8.2K J |

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| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **RESISTOR** | | | |
| | R668 | VE-30000790 | CF RES. | 1/4W 6.8R J |
| | R669 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R670 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R674 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| ⚠ | R675 | VE-30001244 | FUSE RES. | 1/2W 0.47R J |
| | R677 | VE-30001124 | MO RES. | 3W 220R J |
| | R678 | VE-30014022 | SMD RES. | 1/16W 47R J |
| | R680 | VE-30000477 | CF RES. | 1/4W 100K J |
| | R681 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R682 | VE-30008856 | MO RES. | 2W 270R J |
| | R683 | VE-30017083 | WW RES. | 5W 2.2K J RAD. |
| | R689 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R690 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R691 | VE-30012696 | SMD RES. | 1/16W 47K J |
| | R692 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R693 | VE-30012708 | SMD RES. | 1/16W 68K J |
| | R694 | VE-30000689 | CF RES. | 1/4W 3.9K J |
| | R695 | VE-30000471 | CF RES. | 1/4W 10K J |
| | R696-Y | VE-30001350 | ZENER DIODE | 12V |
| | R697 | VE-30000712 | CF RES. | 1/4W 470R J |
| | R698 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R699 | VE-30012685 | SMD RES. | 1/16W 33K J |
| | R700 | VE-30012649 | SMD RES. | 1/16W 150R J |
| | R701 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R703 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R705 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R715 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R717 | VE-30012702 | SMD RES. | 1/16W 560R J |
| | R719 | VE-30012657 | SMD RES. | 1/16W 1K J |
| | R721 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R722 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R723 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R724 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R801 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R803 | VE-30012659 | SMD RES. | 1/16W 2.2K J |
| | R805 | VE-30000650 | CF RES. | 1/4W 33R J |
| | R806 | VE-30000982 | MF RES. | 1/4W 4.7K J |
| | R807 | VE-30001173 | MO RES. | 1W 0.47R J |
| | R809 | VE-30007784 | MO RES. | 5W 33K J(RADIAL) |
| ⚠ | R810 | VE-30001257 | MG RES. | 1/2W 4.7M J |
| | R811 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R812 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R813 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R814 | VE-30000466 | CF RES. | 1/4W 1K J |
| | R817 | VE-30000880 | MF RES. | 1/4W 130K F |
| | R818 | VE-30012675 | SMD RES. | 1/16W 2K J |
| | R819 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R828 | VE-30000530 | CF RES. | 1/2W 15K J |
| | R829 | VE-30000530 | CF RES. | 1/2W 15K J |
| | R834 | VE-30001159 | MO RES. | 1W 0.33R J |
| | R836 | VE-30012662 | SMD RES. | 1/16W 2.7K J |
| | R839 | VE-30000526 | CF RES. | 1/4W 1.5K J |
| | R842 | VE-30014128 | SMD RES. | 1/16W 33R J |
| | R844 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R845 | VE-30012509 | SMD RES. | 1/16W 100K J |
| | R846 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | R847 | VE-30014128 | SMD RES. | 1/16W 33R J |
| | R848 | VE-30012641 | SMD RES. | 1/16W 10K J |
| | R849 | VE-30012510 | SMD RES. | 1/16W 100R J |
| | R851 | VE-30000718 | CF RES. | 1/4W 4.7K J |
| | R852 | VE-30000650 | CF RES. | 1/4W 33R J |
| | R853 | VE-30012642 | SMD RES. | 1/16W 120K J |
| | R855 | VE-30000459 | CF RES. | 1/4W 100R J |
| | R856 | VE-30012694 | SMD RES. | 1/16W 470K J |
| | **CAPACITOR** | | | |
| | C141 | VE-30007081 | EL CAP. | 4.7UF 50V M (NPL) |
| | C142 | VE-30007081 | EL CAP. | 4.7UF 50V M (NPL) |
| | C143 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C144 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C145 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C146 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C147 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C148 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C149 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C150 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C155 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C157 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C159 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C160 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C161 | VE-30000345 | EL CAP. | 10UF 50V M |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **CAPACITOR** | | | |
| | C162 | VE-30012573 | SMD CAP. | 47PF 50V J |
| | C164 | VE-30012692 | SMD RES. | 1/16W 4.7K J |
| | C165 | VE-30000413 | EL CAP. | 4.7UF 50V M |
| | C201 | VE-30000400 | EL CAP. | 47UF 50V M |
| | C205 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C206 | VE-30012610 | SMD CAP. | 10NF 50V J |
| | C207 | VE-30012610 | SMD CAP. | 10NF 50V J |
| | C230 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C246 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C303 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C305 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C310 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C333 | VE-30000083 | MKT CAP. | 150NF 63V J |
| | C363 | VE-30000083 | MKT CAP. | 150NF 63V J |
| | C364 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C366 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C368 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C404 | VE-30000190 | CER CAP. | 100PF 50V J CH |
| | C408 | VE-30012586 | SMD CAP. | 22NF 50V K |
| | C409 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C410 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C411 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C412 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C413 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C414 | VE-30012585 | SMD CAP. | 2.2NF 50V K R |
| | C415 | VE-30012581 | SMD CAP. | 1NF 50V K R |
| | C416 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C417 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C418 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C419 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C420 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C422 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C423 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C424 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C425 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C427 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C429 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C430 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C431 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C432 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C433 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C434 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C435 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C436 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C437 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C438 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C439 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C440 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C441 | VE-30012582 | SMD CAP. | 10NF 50V K R |
| | C442 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C443 | VE-30000362 | EL CAP. | 1UF 50V M |
| | C444 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C448 | VE-30012586 | SMD CAP. | 22NF 50V K |
| | C449 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C453 | VE-30000352 | EL CAP. | 100UF 16V M |
| | C455 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C459 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C501 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C502 | VE-30000400 | EL CAP. | 47UF 50V M |
| | C504 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C505 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C507 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C510 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C511 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C513 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C514 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C515 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C517 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C518 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C519 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C520 | VE-30012560 | SMD CAP. | 100PF 50V J |
| | C521 | VE-30012562 | SMD CAP. | 15PF 50V J |
| | C522 | VE-30012562 | SMD CAP. | 15PF 50V J |
| | C523 | VE-30012585 | SMD CAP. | 2.2NF 50V K R |
| | C524 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C525 | VE-30012566 | SMD CAP. | 22PF 50V J |
| | C526 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C527 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C529 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C530 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C532 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C536 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C541 | VE-30000362 | EL CAP. | 1UF 50V M |

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| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **CAPACITOR** | | | |
| | C542 | VE-30000107 | MKT CAP. | 47NF 250V J |
| | C543 | VE-30000431 | CER CAP. | 100PF 1KV M |
| | C544 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C547 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C565 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C566 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C567 | VE-30000431 | CER CAP. | 100PF 1KV M |
| | C602 | VE-30017319 | MKT CAP. | 120NF 63V J |
| | C604 | VE-30000356 | EL CAP. | 100UF 63V M |
| | C605 | VE-30000360 | EL CAP. | 1000UF 25V M |
| | C607 | VE-30012581 | SMD CAP. | 1NF 50V K R |
| ⚠ | C618 | VE-30000159 | MKP CAP. | 4.7NF 1.6KV J |
| ⚠ | C621 | VE-30000179 | MKP CAP. | 9.1NF 1600V 9.5 |
| | C622 | VE-30000121 | KP CAP. | 27NF 630V J |
| ⚠ | C625 | VE-30000156 | MKP CAP. | 430NF 250V J |
| | C627 | VE-30000167 | MKP CAP. | 560NF 250V J |
| | C629 | VE-30000177 | MKP CAP. | 820NF 250V J |
| | C632 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C635 | VE-30000385 | EL CAP. | 2.2UF 250V M |
| | C636 | VE-30000387 | EL CAP. | 33UF 50V M |
| | C640 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C641 | VE-30000090 | MKT CAP. | 22NF 100V J |
| | C642 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C644 | VE-30000409 | EL CAP. | 470UF 25V M |
| | C645 | VE-30000090 | MKT CAP. | 22NF 100V J |
| | C646 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C647 | VE-30007748 | EL CAP. | 1000UF 35V M |
| | C648 | VE-30000394 | EL CAP. | 3.3UF 160V M |
| | C649 | VE-30000295 | CER CAP. | 100NF 50V Z F |
| | C652 | VE-30000330 | CER CAP. | 4.7NF 50V K B |
| | C653 | VE-30000107 | MKT CAP. | 47NF 250V J |
| | C655 | VE-30000415 | EL CAP. | 4.7UF 250V M |
| | C700 | VE-30012565 | SMD CAP. | 1.8PF 50V J CH |
| | C701 | VE-30012565 | SMD CAP. | 1.8PF 50V J CH |
| | C702 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C703 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C704 | VE-30012576 | SMD CAP. | 56PF 50V J CH |
| | C705 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C706 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C708 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C712 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C713 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C714 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C716 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C717 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C718 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C719 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C720 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C721 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C723 | VE-30000100 | MKT CAP. | 330NF 63V J |
| | C724 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C729 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C730 | VE-30000393 | EL CAP. | 3.3UF 50V M |
| | C733 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C734 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C735 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| | C736 | VE-30000345 | EL CAP. | 10UF 50V M |
| | C737 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C738 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C739 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C740 | VE-30000384 | EL CAP. | 2.2UF 50V M |
| | C741 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C742 | VE-30012589 | SMD CAP. | 4.7NF 50V K |
| | C745 | VE-30016654 | SMD CAP. | 100NF 16V K R |
| ⚠ | C801 | VE-30000094 | MKT CAP. | 220NF 275V M AC |
| ⚠ | C802 | VE-30000094 | MKT CAP. | 220NF 275V M AC |
| ⚠ | C803 | VE-30000433 | CER CAP. | 1NF 1KV M B |
| ⚠ | C804 | VE-30000433 | CER CAP. | 1NF 1KV M B |
| | C808 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C809 | VE-30000420 | EL CAP. | 150UF 400V M |
| | C810 | VE-30000387 | EL CAP. | 33UF 50V M |
| | C811 | VE-30000161 | MKP CAP. | 47NF 630V J |
| | C812 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| ⚠ | C816 | VE-30000440 | CER CAP. | 2.2NF 4KV M |
| | C817 | VE-30000198 | CER CAP. | 120PF 500V J SL |
| | C818 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C819 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C822 | VE-30007308 | CER CAP. | 220PF 1KV K (PULSE) |
| | C826 | VE-30000406 | EL CAP. | 47UF 250V M (HR) |
| | C827 | VE-30000411 | EL CAP. | 4700UF 16V M |
| | C828 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C829 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C830 | VE-30000383 | EL CAP. | 2200UF 25V M |

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | **CAPACITOR** | | | |
| | C832 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C833 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C834 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C835 | VE-30012590 | SMD CAP. | 47NF 50V K |
| | C838 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C839 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C840 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C848 | VE-30000407 | EL CAP. | 470UF 16V M |
| | C850 | VE-30000383 | EL CAP. | 2200UF 25V M |
| | C851 | VE-30012590 | SMD CAP. | 47NF 50V K |
| ⚠ | C852 | VE-30000440 | CER CAP. | 2.2NF 4KV M |
| | C857 | VE-30000106 | MKT CAP. | 47NF 100V J |
| | C858 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| | C859 | VE-30009208 | CER CAP. | 470PF 1KV K (PULSE) |
| | C860 | VE-30000296 | CER CAP. | 100NF 100V Z F |
| | C872 | VE-30007708 | CER CAP. | 1NF 1KV K (PULSE) |
| | **TRANSF** | | | |
| | TR600 | VE-30002090 | LINE DRIVER | |
| ⚠ | TR601 | VE-30017522 | FBT TRF | |
| ⚠ | TR802 | VE-30018785 | SMPS TRF | |
| | **COIL** | | | |
| | L101 | VE-30001971 | FERRITE BEAT | |
| | L102 | VE-30001971 | FERRITE BEAT | |
| | L106 | VE-30001971 | FERRITE BEAT | |
| | L108 | VE-30001971 | FERRITE BEAT | |
| | L109 | VE-30001971 | FERRITE BEAT | |
| | L110 | VE-30001971 | FERRITE BEAT | |
| | L111 | VE-30001971 | FERRITE BEAT | |
| | L112 | VE-30001971 | FERRITE BEAT | |
| | L113 | VE-30001971 | FERRITE BEAT | |
| | L114 | VE-30001971 | FERRITE BEAT | |
| | L115 | VE-30001971 | FERRITE BEAT | |
| | L116 | VE-30001971 | FERRITE BEAT | |
| | L117 | VE-30001971 | FERRITE BEAT | |
| | L201 | VE-30001979 | FIXED COIL | 1UH |
| | L210 | VE-30001971 | FERRITE BEAT | |
| | L215 | VE-30001971 | FERRITE BEAT | |
| | L401 | VE-30001971 | FERRITE BEAT | |
| | L402 | VE-30001992 | FIXED COIL | 10UH |
| | L403 | VE-30001971 | FERRITE BEAT | |
| | L405 | VE-30014048 | ADJ. COIL | 44MHZ |
| | L406 | VE-30001971 | FERRITE BEAT | |
| | L408 | VE-30001992 | FIXED COIL | 10UH |
| | L501 | VE-30001971 | FERRITE BEAT | |
| | L502 | VE-30001971 | FERRITE BEAT | |
| | L503 | VE-30001971 | FERRITE BEAT | |
| | L504 | VE-30001971 | FERRITE BEAT | |
| | L600 | VE-30002031 | FIXED COIL | 15MH |
| | L602 | VE-30002156 | LINEARITY COIL | 30UH |
| | L603 | VE-30002026 | FIXED COIL | 1MH |
| | L700 | VE-30001971 | FERRITE BEAT | |
| | L701 | VE-30001971 | FERRITE BEAT | |
| | L702 | VE-30001992 | FIXED COIL | 10UH |
| | L703 | VE-30001971 | FERRITE BEAT | |
| | L704 | VE-30001971 | FERRITE BEAT | |
| | L801 | VE-30002011 | CHOKE COIL | 150UH |
| | L803 | VE-30001992 | FIXED COIL | 10UH |
| | **DIODE** | | | |
| | D105 | VE-30007760 | ZENER DIODE | |
| | D106 | VE-30007760 | ZENER DIODE | |
| | D107 | VE-30007760 | ZENER DIODE | |
| | D303 | VE-30001329 | DIODE | |
| | D405 | VE-30007763 | ZENER DIODE | |
| | D407 | VE-30001284 | DIODE | |
| | D408 | VE-30001285 | DIODE | |
| | D409 | VE-30001284 | DIODE | |
| | D413 | VE-30018526 | ZENER DIODE | |
| | D501 | VE-30001285 | DIODE | |
| | D505 | VE-30001285 | DIODE | |
| | D506 | VE-30001284 | DIODE | |
| | D512 | VE-30001285 | DIODE | |
| | D513 | VE-30001369 | ZENER DIODE | |
| | D533 | VE-30001377 | ZENER DIODE | |

## [ AV-28BS88EN ]

### DIODE

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | D601 | VE-30001329 | DIODE | |
| | D603 | VE-30001285 | DIODE | |
| | D605 | VE-30001320 | DIODE | |
| | D606 | VE-30001323 | DIODE | |
| | D609 | VE-30001318 | DIODE | |
| | D610 | VE-30001318 | DIODE | |
| | D613 | VE-30001318 | DIODE | |
| | D614 | VE-30001285 | DIODE | |
| | D616 | VE-30003696 | DIODE | |
| | D617 | VE-30001318 | DIODE | |
| | D651 | VE-30001285 | DIODE | |
| | D653 | VE-30001285 | DIODE | |
| | D656 | VE-30007763 | ZENER DIODE | |
| | D657 | VE-30007763 | ZENER DIODE | |
| | D658 | VE-30007763 | ZENER DIODE | |
| | D659 | VE-30001350 | ZENER DIODE | |
| | D660 | VE-30001347 | ZENER DIODE | |
| | D661 | VE-30001350 | ZENER DIODE | |
| | D700 | VE-30001285 | DIODE | |
| | D701 | VE-30001369 | ZENER DIODE | |
| | D800 | VE-30001318 | DIODE | |
| | D801 | VE-30001372 | ZENER DIODE | |
| | D802 | VE-30001318 | DIODE | |
| | D803 | VE-30001315 | DIODE | |
| | D804 | VE-30001318 | DIODE | |
| | D805 | VE-30001315 | DIODE | |
| | D806 | VE-30001315 | DIODE | |
| | D808 | VE-20092405 | CN.ASY | |
| | D809 | VE-30001329 | DIODE | |
| | D810 | VE-30009366 | DIODE | |
| | D811 | VE-30009366 | DIODE | |
| | D812 | VE-30001285 | DIODE | |
| | D889 | VE-30001384 | TR | |
| ⚠ | D891 | VE-30007758 | BRIDGE DIODE | |
| | D892 | VE-30001318 | DIODE | |
| | D893 | VE-30001318 | DIODE | |
| | D894 | VE-30001285 | DIODE | |
| | D897 | VE-30001329 | DIODE | |

### TRANSISTOR

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | Q104 | VE-30001457 | TR | |
| | Q106 | VE-30001457 | TR | |
| | Q141 | VE-30001457 | TR | |
| | Q142 | VE-30001457 | TR | |
| | Q307 | VE-30001457 | TR | |
| | Q316 | VE-30001458 | TR | |
| | Q403 | VE-30001457 | TR | |
| | Q404 | VE-30001457 | TR | |
| | Q503 | VE-30001457 | TR | |
| | Q504 | VE-30001458 | TR | |
| | Q600 | VE-30001435 | TR | |
| ⚠ | Q601 | VE-30001441 | TR | H.OUT |
| | Q602 | VE-30001429 | TR | |
| | Q603 | VE-30001458 | TR | |
| | Q604 | VE-30001457 | TR | |
| | Q605 | VE-30001458 | TR | |
| | Q700 | VE-30001458 | TR | |
| | Q801 | VE-30001386 | TR | |
| | Q802 | VE-30001457 | TR | |
| | Q804 | VE-30001454 | TR | |

### IC

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | IC301 | VE-30016113 | IC | |
| | IC403 | VE-30014521 | IC | |
| | IC500 | VE-20101581 | IC | (SERVICE) |
| | IC501 | VE-20101580 | IC | (MICOM) |
| | IC601 | VE-30013985 | IC | |
| | IC700 | VE-30009354 | IC | |
| | IC800 | VE-30011968 | IC | |
| ⚠ | IC801 | VE-30015087 | IC | |
| | IC802 | VE-30001622 | IC | |
| | IC803 | VE-30001500 | IC | |
| | IC804 | VE-30001622 | IC | |
| | IC818 | VE-30001506 | IC | |

### OTHERS

| ⚠ | Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| ⚠ | TR801 | VE-30002104 | LINE FILTER | |
| ⚠ | F801 | VE-30001731 | FUSE | 2.5A |
| ⚠ | TH800 | VE-30001270 | PTC | 9 OHM |
| | TU201 | VE-30009637 | TUNER | |
| | VR800 | VE-30001064 | RES ADJ | |
| | X401 | VE-30001749 | XTAL | |
| | X402 | VE-30015592 | XTAL | |
| | X501 | VE-30002851 | XTAL | |
| | X700 | VE-30001756 | XTAL | |
| | Z401 | VE-30001705 | SAW FILTER | |
| | Z402 | VE-30015591 | SAW FILTER | |

### CRT SOCKET P.W. BOARD ASS'Y (VE-20094670)

Refer to PARTS LIST in page 30 for this P.W . board

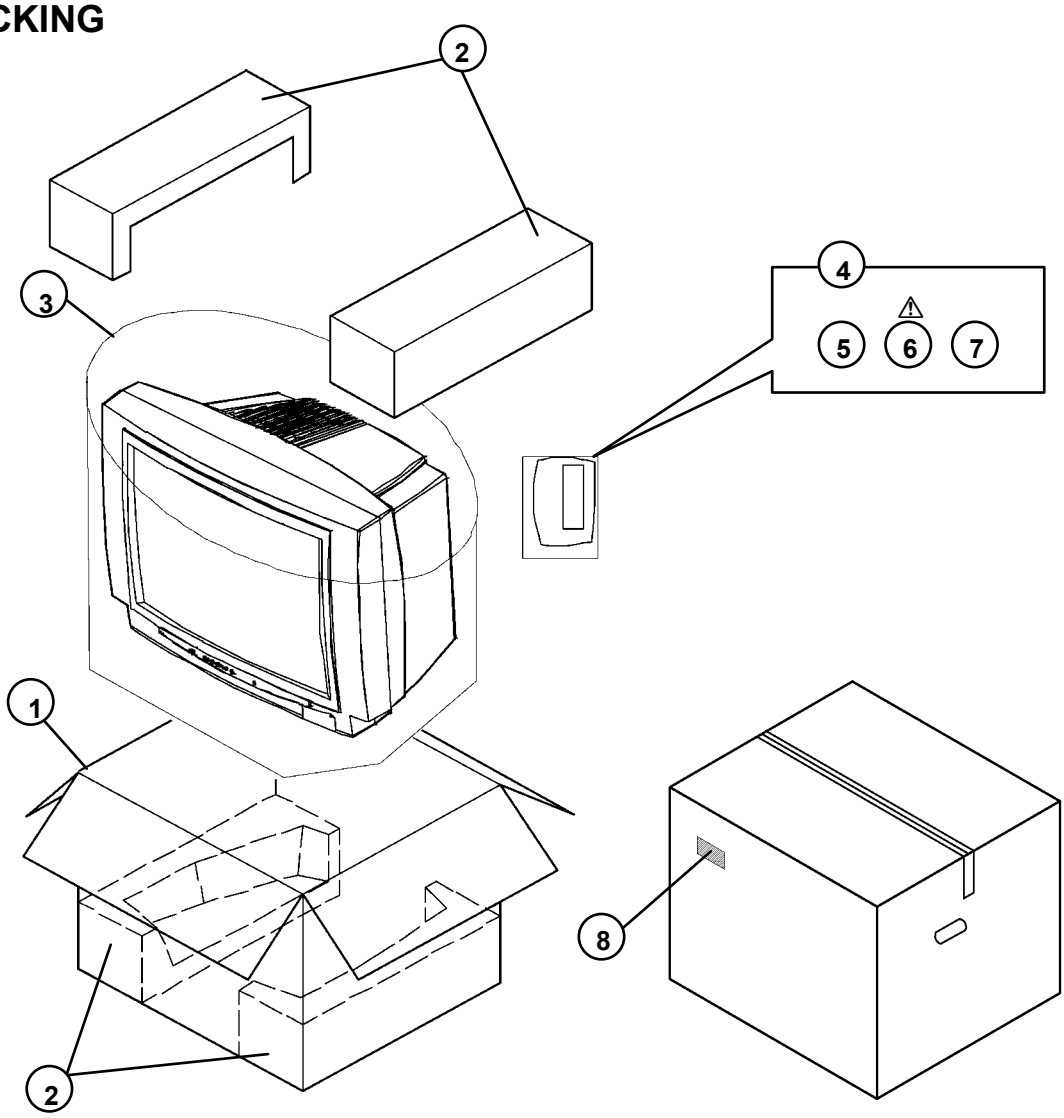
### FRONT CONTROL P.W. BOARD ASS'Y (VE-20082481)

Refer to PARTS LIST in page 30 for this P.W . board

### FRONT AV & HEADPHONE P.W. BOARD ASS'Y (VE-20083646)

Refer to PARTS LIST in page 30 for this P.W . board

# PACKING




# PACKING PARTS LIST

| ⚠ | Ref.No. | Part No. | Part Name | Description |
|---|---|---|---|---|
| | 1 | VE-50028496 | CARTON BOX | (AV-28BT8ENS) |
| | 1 | VE-50028502 | CARTON BOX | (AV-28BT8ENB) |
| | 1 | VE-50028500 | CARTON BOX | (AV-28BT80EN) |
| | 1 | VE-50028498 | CARTON BOX | (AV-28BS88EN) |
| | 1 | VE-50028423 | CARTON BOX | (AV-28BT8EPS) |
| | 1 | VE-50028424 | CARTON BOX | (AV-28BT8EPB) |
| | 1 | VE-50028221 | CARTON BOX | (AV-28BT80EP) |
| | 1 | VE-50028218 | CARTON BOX | (AV-28BT8EES) |
| | 1 | VE-50028216 | CARTON BOX | (AV-28BT8EEB) |
| | 2 | VE-20081396 | CUSHION ASS'Y | 4pcs in 1set |
| | 3 | VE-50026637 | POLY BAG | |
| | 4 | VE-70000587 | POLY BAG | |
| | 5 | VE-30017763 | REMOTE CONTROL UNIT | (RM-C1100) |
| ⚠ | 6 | VE-50028493 | INST BOOK | (AV-28BT8ENS,ENB,AV-28BT80EN) |
| ⚠ | 6 | VE-50028296 | INST BOOK | (AV-28BT8EPS,EPB,AV-28BT80EP) |
| ⚠ | 6 | VE-50028326 | INST BOOK | (AV-28BT8EES,EEB) |
| ⚠ | 6 | VE-50028511 | INST BOOK | (AV-28BS88EN) |
| | 7 | BT-54013-2TK | WARRANTY CARD | |
| | 8 | VE-20102137 | LABEL | (AV-28BT8ENS) |
| | 8 | VE-20102147 | LABEL | (AV-28BT8ENB) |
| | 8 | VE-20102144 | LABEL | (AV-28BT80EN) |
| | 8 | VE-20102141 | LABEL | (AV-28BS88EN) |
| | 8 | VE-20101937 | LABEL | (AV-28BT8EPS) |
| | 8 | VE-20101939 | LABEL | (AV-28BT8EPB) |
| | 8 | VE-20101934 | LABEL | (AV-28BT80EP) |
| | 8 | VE-20101919 | LABEL | (AV-28BT8EES) |
| | 8 | VE-20101920 | LABEL | (AV-28BT8EES POLAND) |
| | 8 | VE-20101915 | LABEL | (AV-28BT8EEB) |
| | 8 | VE-20101913 | LABEL | (AV-28BT8EEB POLAND) |

JVC

**VICTOR COMPANY OF JAPAN, LIMITED**
HOME AV NETWORK BUSINESS UNIT 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa-prefecture, 221-8528, Japan

VP 0207
DP20588051

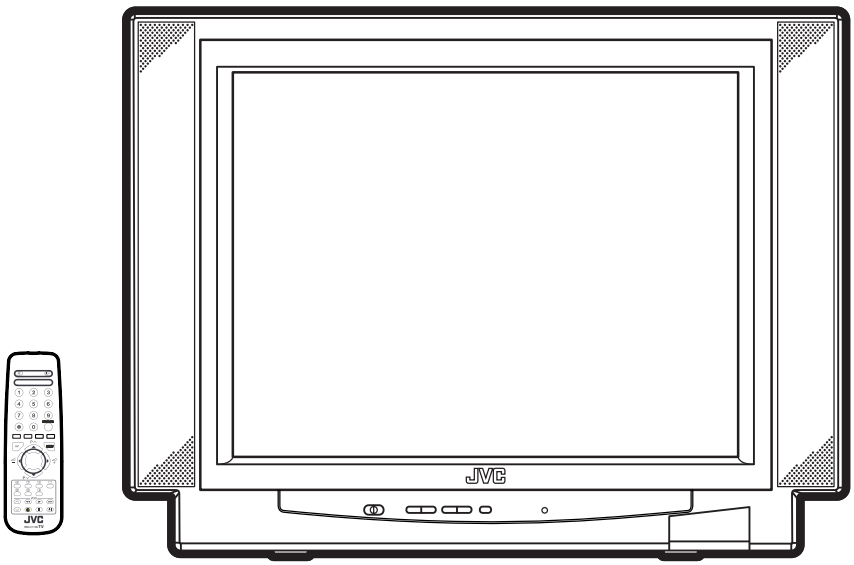
JVC

# SCHEMATIC DIAGRAMS

## COLOUR TELEVISION

# AV-28BT8ENS / AV-28BT8ENB
# AV-28BT80EN / AV-28BT8EPS
# AV-28BT8EPB / AV-28BT80EP
# AV-28BT8EES / AV-28BT8EEB
# AV-28BS88EN

**CD-ROM No.SML200207**



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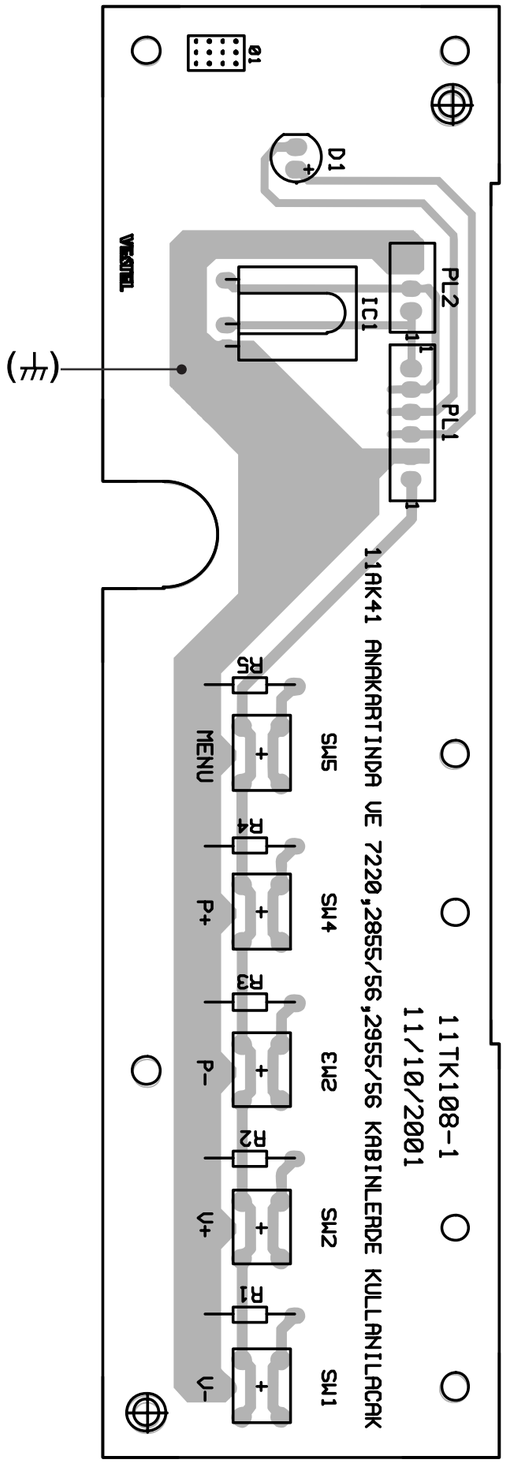
No.52057
Jul. 2002

***FRONT CONTROL PWB PATTERN***




TOP



VP0207
DP6060

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

# AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN
# AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP
# AV-28BT8EES, AV-28BT8EEB,AV-28BS88EN

# STANDARD CIRCUIT DIAGRAM

## ■ NOTE ON USING CIRCUIT DIAGRAMS

### 1.SAFETY

**The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.**

### 2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

| | |
|---|---|
| (1)Input signal | : Colour bar signal |
| (2)Setting positions of each knob/button and variable resistor | : Original setting position when shipped |
| (3)Internal resistance of tester | :DC 20kΩ /V |
| (4)Oscilloscope sweeping time | :H ⇒ 20μS/div<br>:V ⇒ 5mS/div<br>:Others ⇒ Sweeping time is specified |
| (5)Voltage values | :All DC voltage values |

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

### 3.INDICATIONS ON THE CIRCUIT DIAGRAM

**(1)Resistors**

● Resistance value

| | |
|---|---|
| No unit | :[ Ω ] |
| K | :[K Ω ] |
| M | :[M Ω ] |

● Type

| | |
|---|---|
| No indication | :Carbon resistor |
| OMR | :Oxide metal film resistor |
| MFR | :Metal film resistor |
| MPR | :Metal plate resistor |
| UNFR | :Uninflammable resistor |
| FR | :Fusible resistor |

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

**(2)Capacitors**

● Capacitance value

| | |
|---|---|
| 1 or higher | :[pF] |
| less than 1 | :[μF] |

● Withstand voltage

| | |
|---|---|
| No indication | :DC50[V] |
| Others | :DC withstand voltage [V] |
| AC indicated | :AC withstand voltage [V] |

∗ Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

● Type

| | |
|---|---|
| No indication | :Ceramic capacitor |
| MM | :Metalized mylar capacitor |
| PP | :Polypropylene capacitor |
| MPP | :Metalized polypropylene capacitor |
| MF | :Metalized film capacitor |
| TF | :Thin film capacitor |
| BP | :Bipolar electrolytic capacitor |
| TAN | :Tantalum capacitor |

**(3)Coils**

| | |
|---|---|
| No unit | :[μH] |
| Others | :As specified |

### 4.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE side GND and the ISOLATED(NEUTRAL) side GND.Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus ( oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

**NOTE**

◇ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
**When ordering parts, please use the numbers that appear in the Parts List.**

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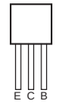
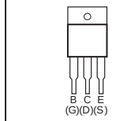
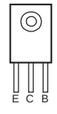
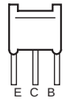
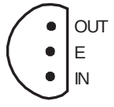
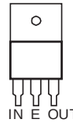
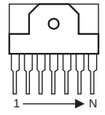
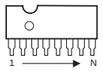
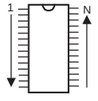
## SEMICONDUCTOR SHAPES

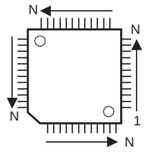
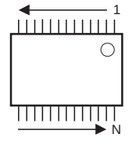
**TRANSISTOR**

| BOTTOM VIEW | FRONT VIEW | | | | TOP VIEW |
|---|---|---|---|---|---|
| |   |   |   |   | CHIP TR |

**IC**

| BOTTOM VIEW | FRONT VIEW | | | TOP VIEW |
|---|---|---|---|---|
|   |   |   |   |   |

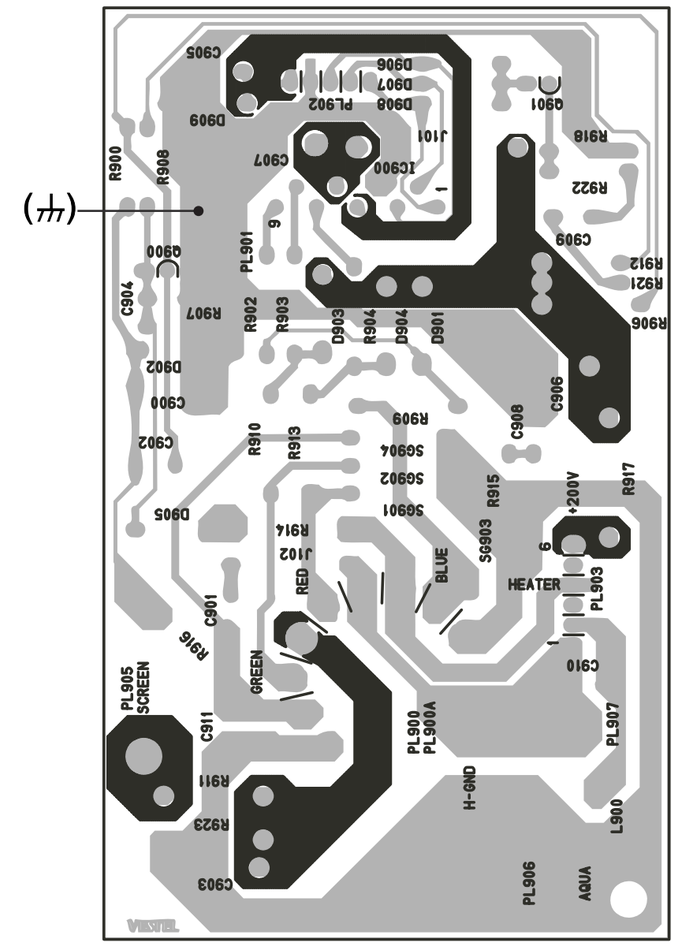
**CHIP IC**

| TOP VIEW | | |
|---|---|---|
|   |   | |

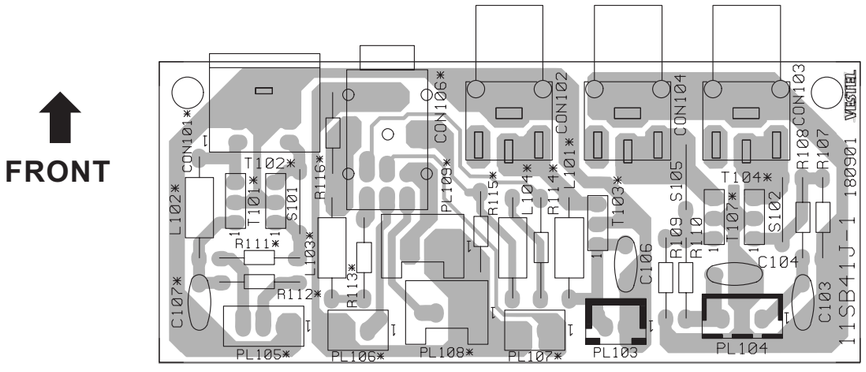




***CRT SOCKET PWB PATTERN***

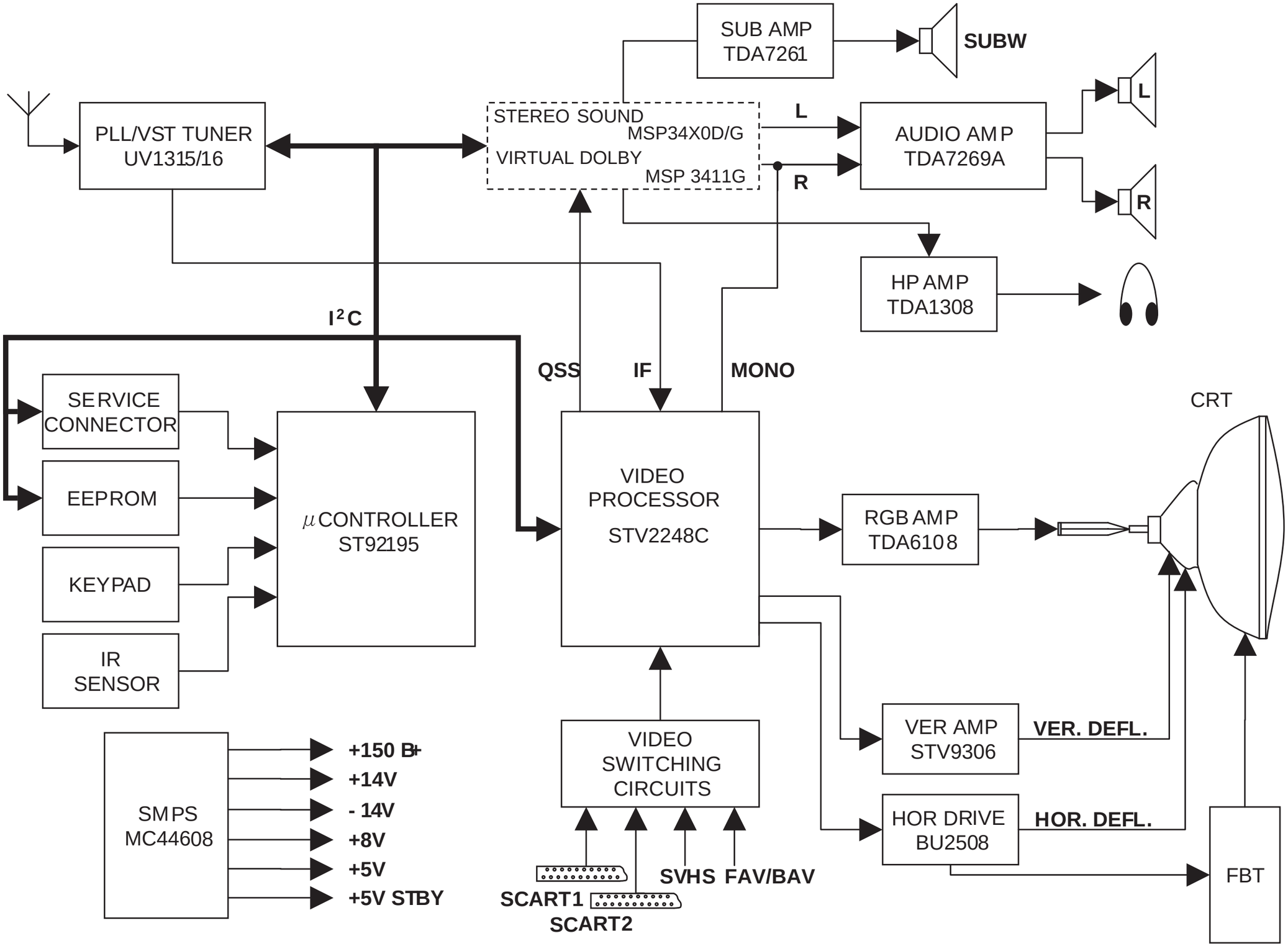



***FRONT AV & HEADPHONE PWB PATTERN***



AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

## BLOCK DIAGRAM



AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

# CIRCUIT DIAGRAMS *MAIN PWB CIRCUIT DIAGRAM [1/6]*

**DIFFERENCE LIST**

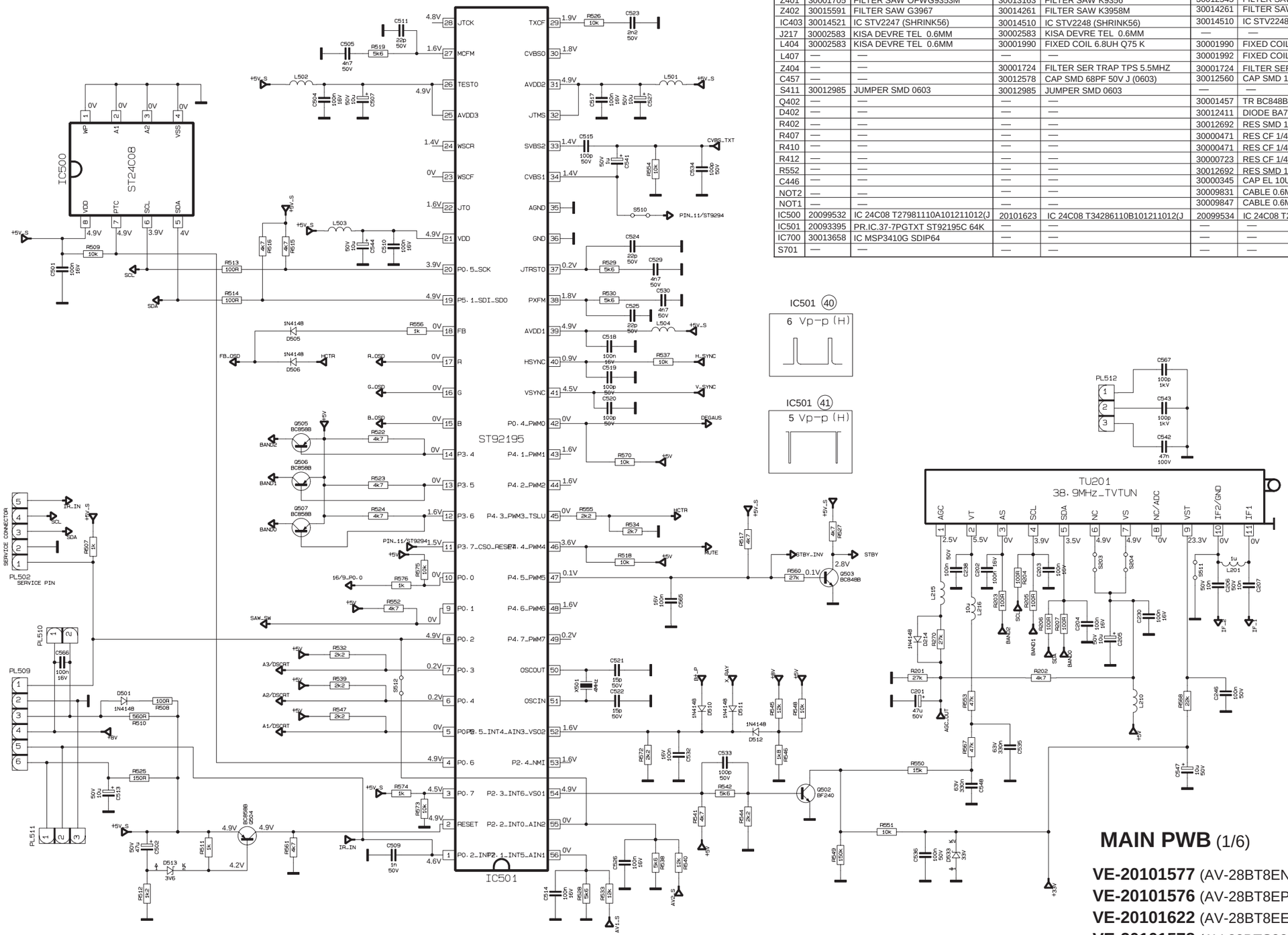
| | EN | | EE | | EP | | AV-28BS88EN | |
|---|---|---|---|---|---|---|---|---|
| Z401 | 30001705 | FILTER SAW OFWG9353M | 30013163 | FILTER SAW K9356 | 30012545 | FILTER SAW K9656M | 30001705 | FILTER SAW OFWG9353M |
| Z402 | 30015591 | FILTER SAW G3967 | 30014261 | FILTER SAW K3958M | 30014261 | FILTER SAW K3958M | 30015591 | FILTER SAW G3967 |
| IC403 | 30014521 | IC STV2247 (SHRINK56) | 30014510 | IC STV2248 (SHRINK56) | 30014510 | IC STV2248 (SHRINK56) | 30014521 | IC STV2247 (SHRINK56) |
| J217 | 30002583 | KISA DEVRE TEL 0.6MM | 30002583 | KISA DEVRE TEL 0.6MM | — | — | 30002583 | KISA DEVRE TEL 0.6MM |
| L404 | 30002583 | KISA DEVRE TEL 0.6MM | 30001990 | FIXED COIL 6.8UH Q75 K | 30001990 | FIXED COIL 6.8UH Q75 K | 30002583 | KISA DEVRE TEL 0.6MM |
| L407 | — | — | — | — | 30001992 | FIXED COIL 10UH Q65 K-A | — | — |
| Z404 | — | — | 30001724 | FILTER SER TRAP TPS 5.5MHZ | 30001724 | FILTER SER TRAP TPS 5.5MHZ | — | — |
| C457 | — | — | 30012578 | CAP SMD 68PF 50V J (0603) | 30012560 | CAP SMD 100PF 50V J (0603) | — | — |
| S411 | 30012985 | JUMPER SMD 0603 | 30012985 | JUMPER SMD 0603 | — | — | 30012985 | JUMPER SMD 0603 |
| Q402 | — | — | — | — | 30001457 | TR BC848B SMD | — | — |
| D402 | — | — | — | — | 30012411 | DIODE BA782 SMD | — | — |
| R402 | — | — | — | — | 30012692 | RES SMD 1/16W 4.7K J (0603) | — | — |
| R407 | — | — | — | — | 30000471 | RES CF 1/4W 10K J | — | — |
| R410 | — | — | — | — | 30000471 | RES CF 1/4W 10K J | — | — |
| R412 | — | — | — | — | 30000723 | RES CF 1/4W 47K J | — | — |
| R552 | — | — | — | — | 30012692 | RES SMD 1/16W 4.7K J (0603) | — | — |
| C446 | — | — | — | — | 30000345 | CAP EL 10UF 50V M | — | — |
| NOT2 | — | — | — | — | 30009831 | CABLE 0.6MM BLUE (5CM) | — | — |
| NOT1 | — | — | — | — | 30009847 | CABLE 0.6MM BLUE (8CM) | — | — |
| IC500 | 20099532 | IC 24C08 T27981110A101211012(J | 20101623 | IC 24C08 T34286110B101211012(J | 20099534 | IC 24C08 T28087110A101211012(J | 20101581 | IC 24C08 T34181110A101211112(J |
| IC501 | 20093395 | PR.IC.37-7PGTXT ST92195C 64K | — | — | — | — | 20101580 | PR.IC.37-7PGTXT ST92195C 64K S |
| IC700 | 30013658 | IC MSP3410G SDIP64 | — | — | — | — | 30009354 | IC MSP3411 SDIP64 |
| S701 | — | — | — | — | — | — | 30002583 | KISA DEVRE TELI 0.6MM |

IC501 (40)




IC501 (41)




## MAIN PWB (1/6)

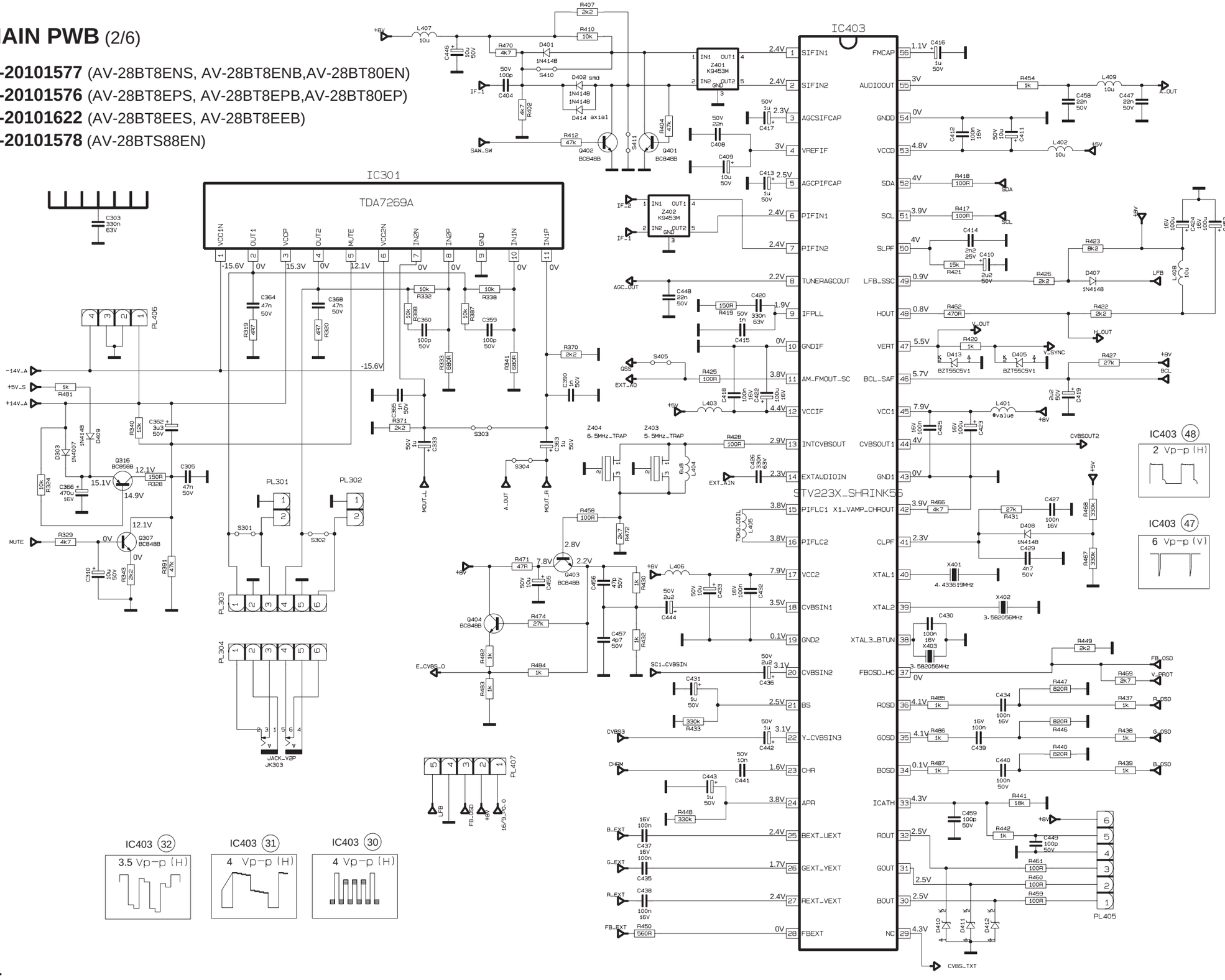
**VE-20101577** (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
**VE-20101576** (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
**VE-20101622** (AV-28BT8EES, AV-28BT8EEB)
**VE-20101578** (AV-28BTS88EN)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

***MAIN PWB CIRCUIT DIAGRAM [2/6]***

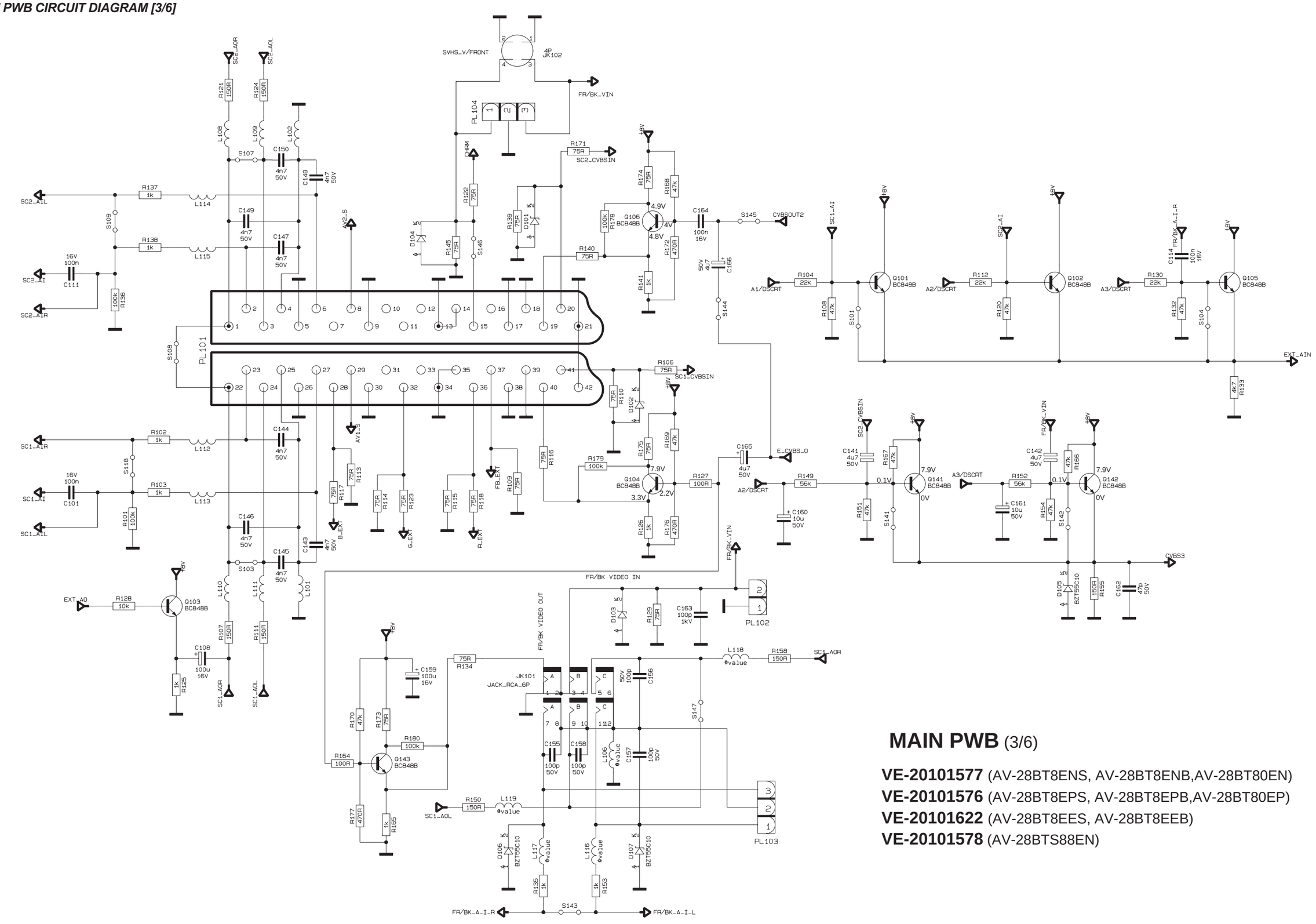
# MAIN PWB (2/6)

**VE-20101577** (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
**VE-20101576** (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
**VE-20101622** (AV-28BT8EES, AV-28BT8EEB)
**VE-20101578** (AV-28BTS88EN)



AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

***MAIN PWB CIRCUIT DIAGRAM [3/6]***




## MAIN PWB (3/6)

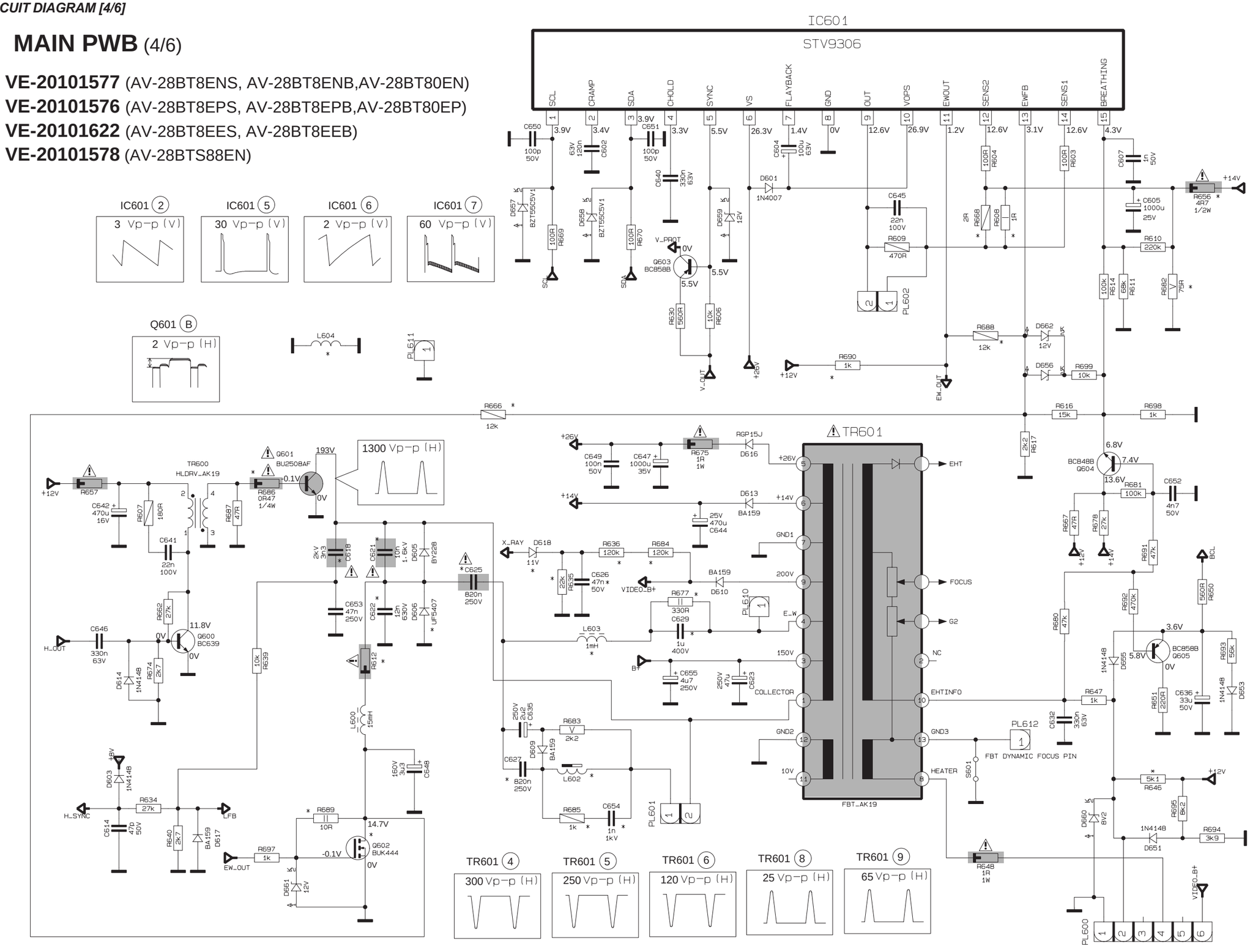
**VE-20101577** (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
**VE-20101576** (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
**VE-20101622** (AV-28BT8EES, AV-28BT8EEB)
**VE-20101578** (AV-28BTS88EN)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

***MAIN PWB CIRCUIT DIAGRAM [4/6]***

# MAIN PWB (4/6)

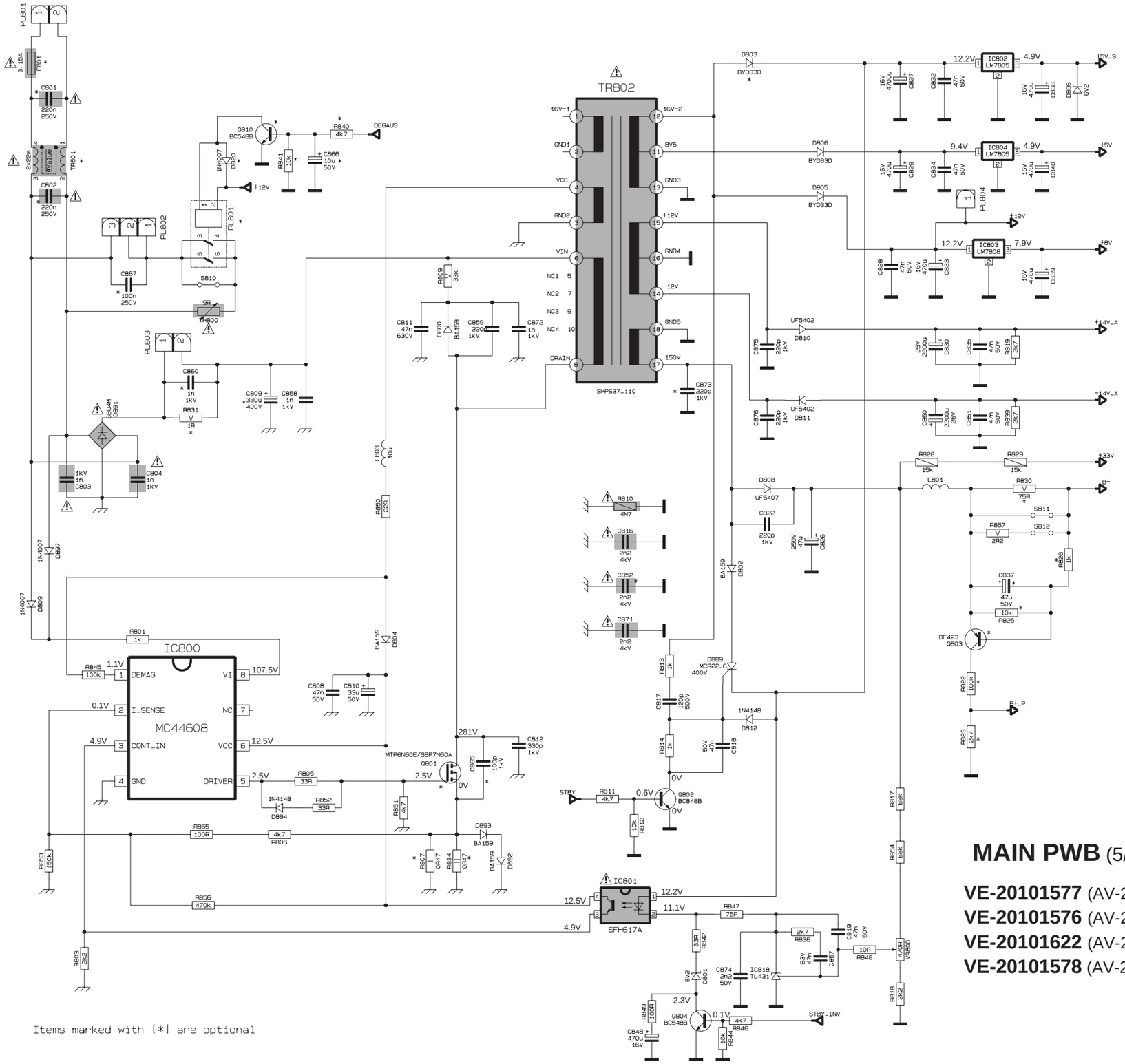
**VE-20101577** (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
**VE-20101576** (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
**VE-20101622** (AV-28BT8EES, AV-28BT8EEB)
**VE-20101578** (AV-28BTS88EN)




Items marked with [*] are optional

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

***MAIN PWB CIRCUIT DIAGRAM [5/6]***

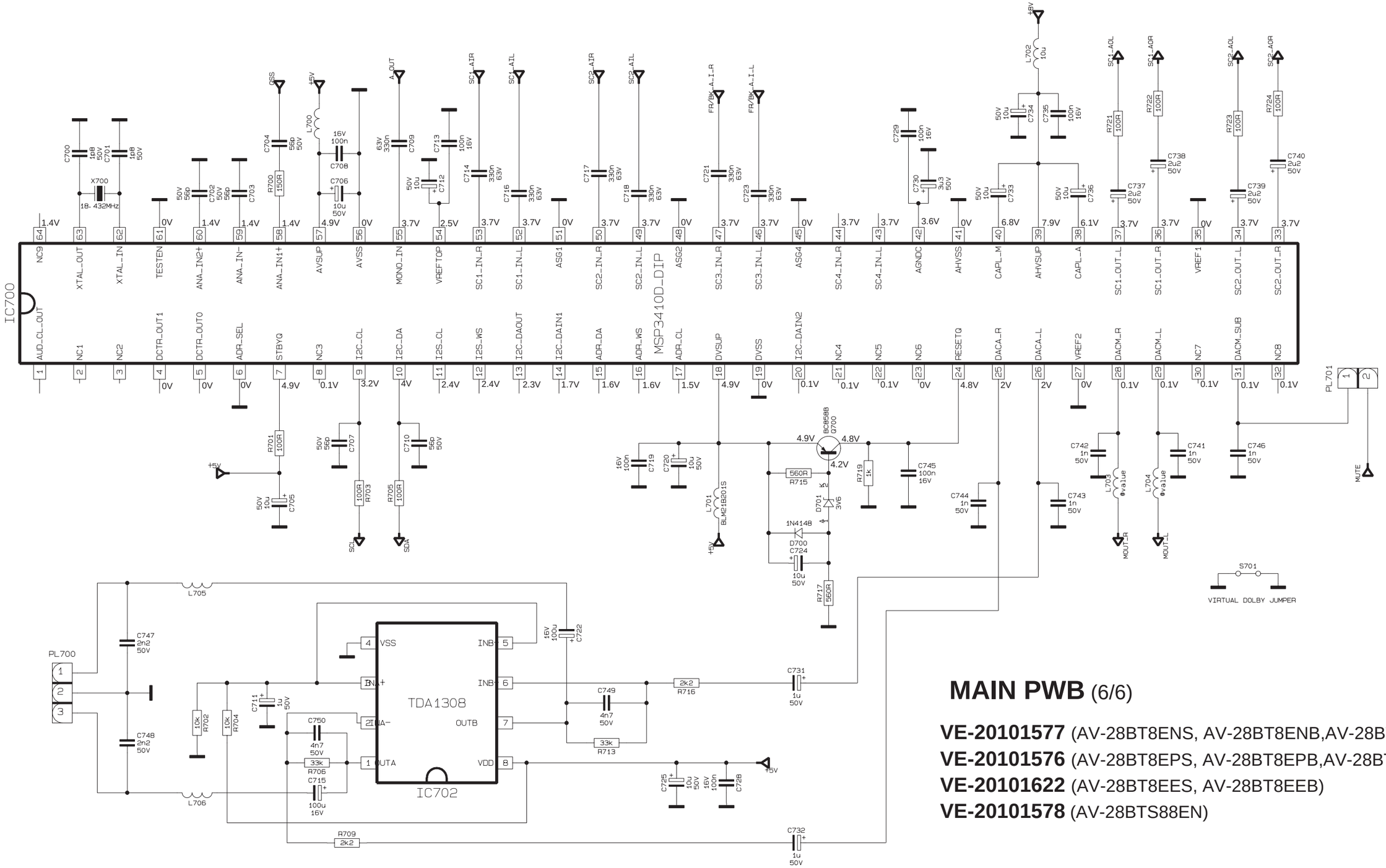



## MAIN PWB (5/6)

**VE-20101577** (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
**VE-20101576** (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
**VE-20101622** (AV-28BT8EES, AV-28BT8EEB)
**VE-20101578** (AV-28BTS88EN)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

***MAIN PWB CIRCUIT DIAGRAM [6/6]***

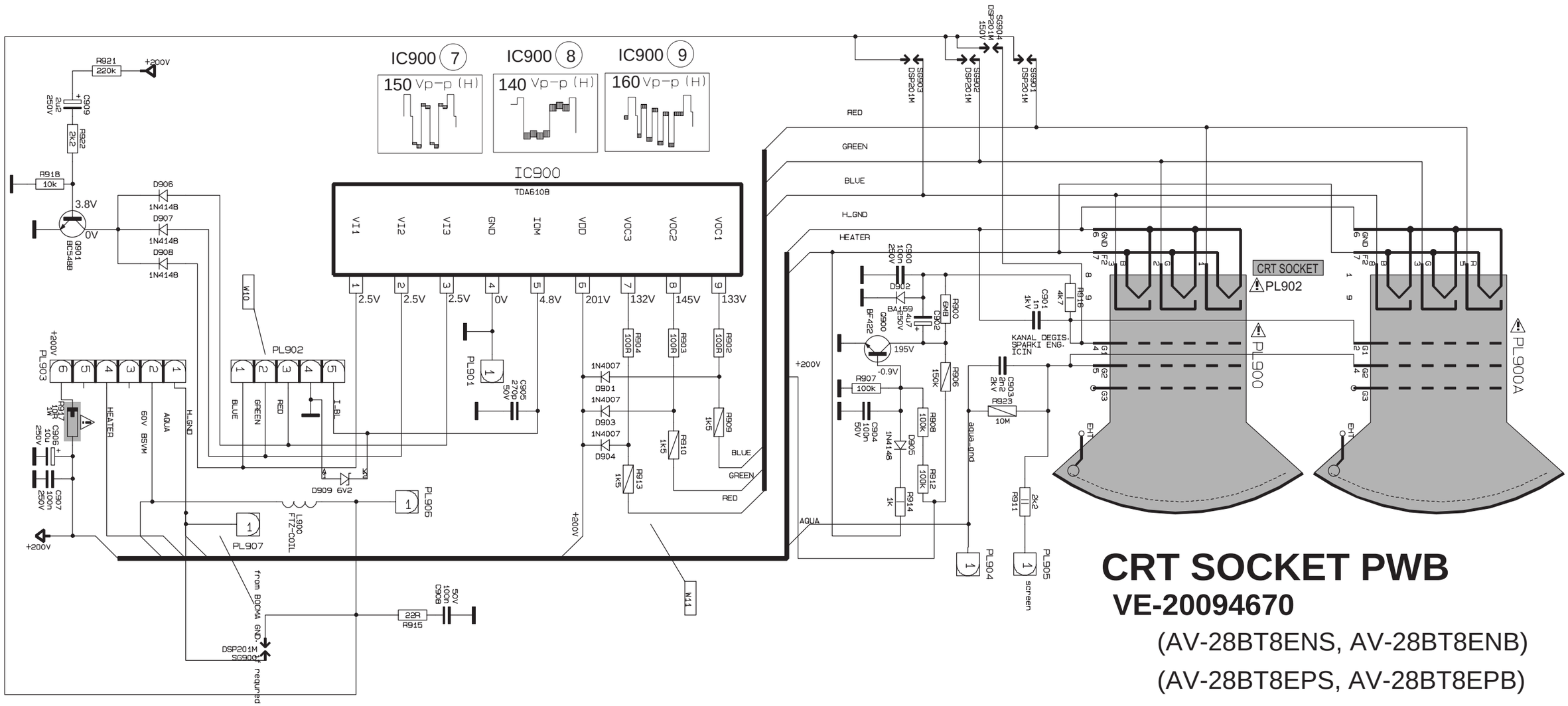



## MAIN PWB (6/6)

**VE-20101577** (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
**VE-20101576** (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
**VE-20101622** (AV-28BT8EES, AV-28BT8EEB)
**VE-20101578** (AV-28BTS88EN)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

***CRT SOCKET PWB CIRCUIT DIAGRAM***




# CRT SOCKET PWB

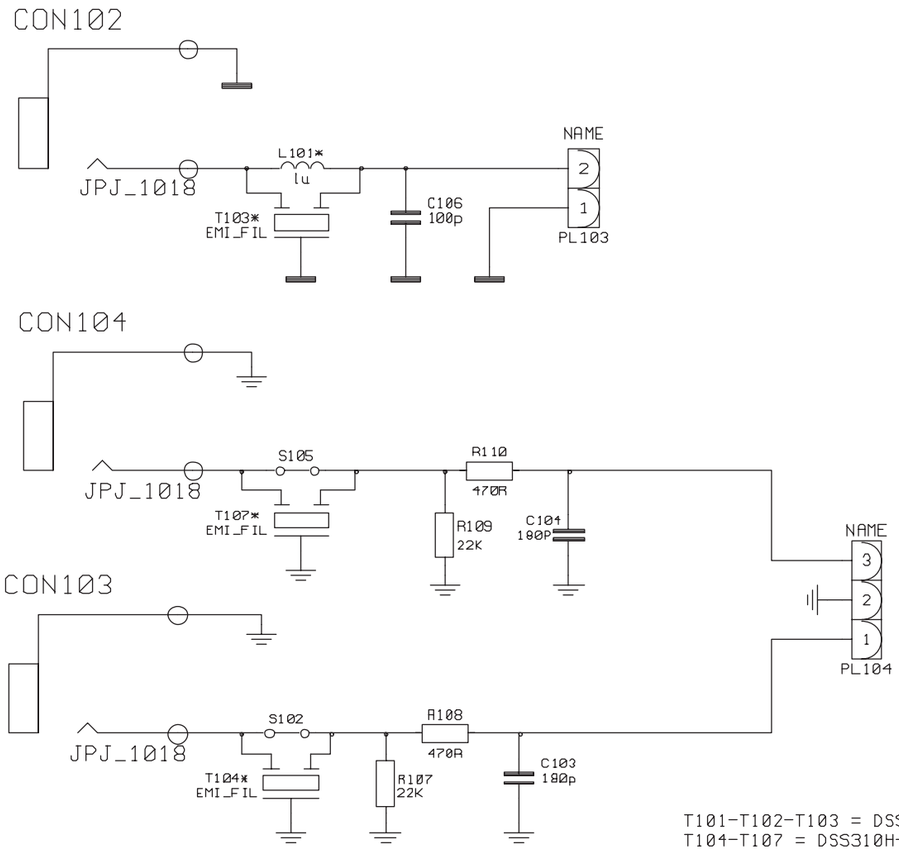
## VE-20094670

(AV-28BT8ENS, AV-28BT8ENB)

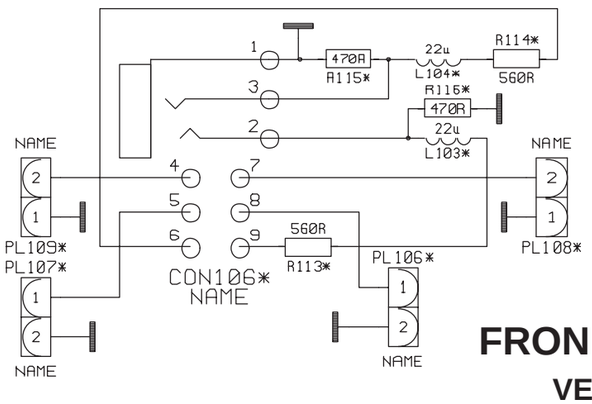
(AV-28BT8EPS, AV-28BT8EPB)

(AV-28BT8EES, AV-28BT8EEB)

### *FRONT AV & HEADPHONE PWB CIRCUIT DIAGRAM*




T101-T102-T103 = DSS310H-55B271M250
T104-T107 = DSS310H-55B222M250




# FRONR AV & HEADPHONE PWB

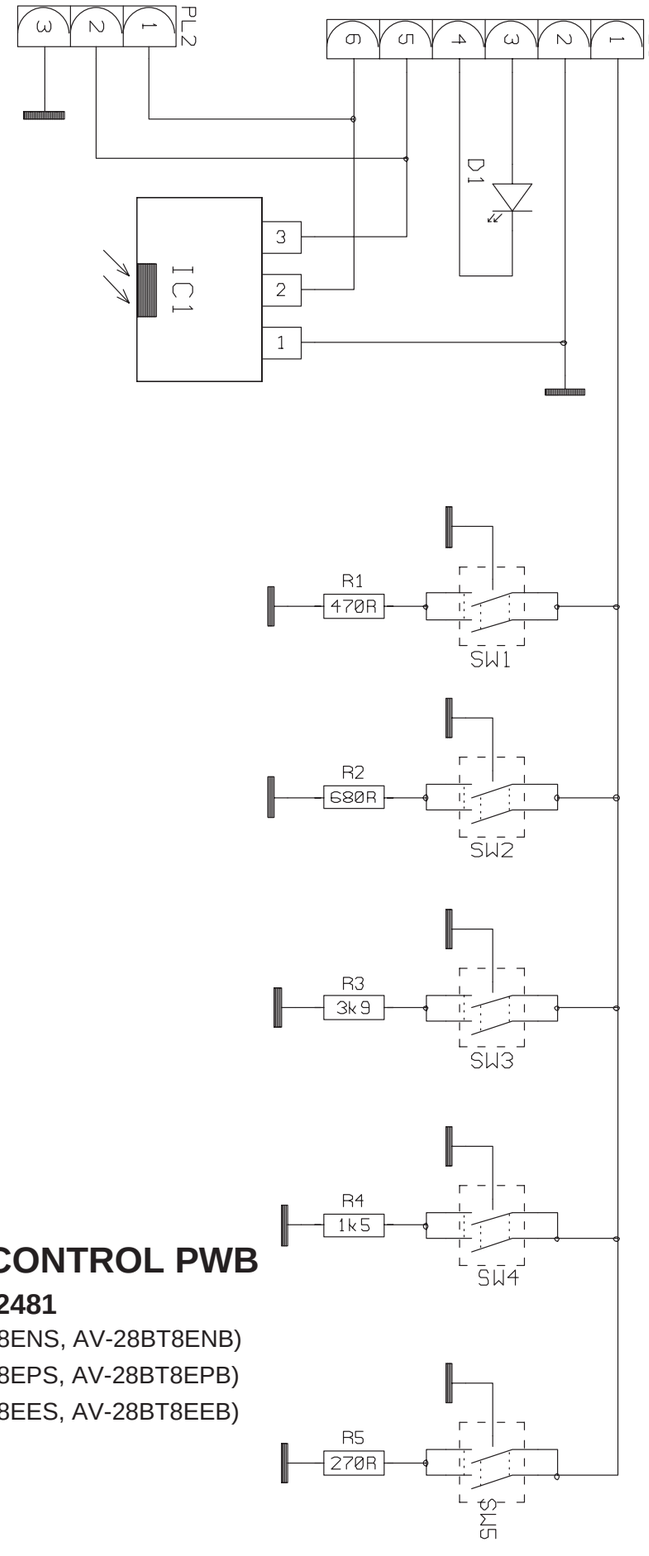
**VE-20083646**

(AV-28BT8ENS, AV-28BT8ENB)
(AV-28BT8EPS, AV-28BT8EPB)
(AV-28BT8EES, AV-28BT8EEB)



AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

### *FRONT CONTROL PWB CIRCUIT DIAGRAM*



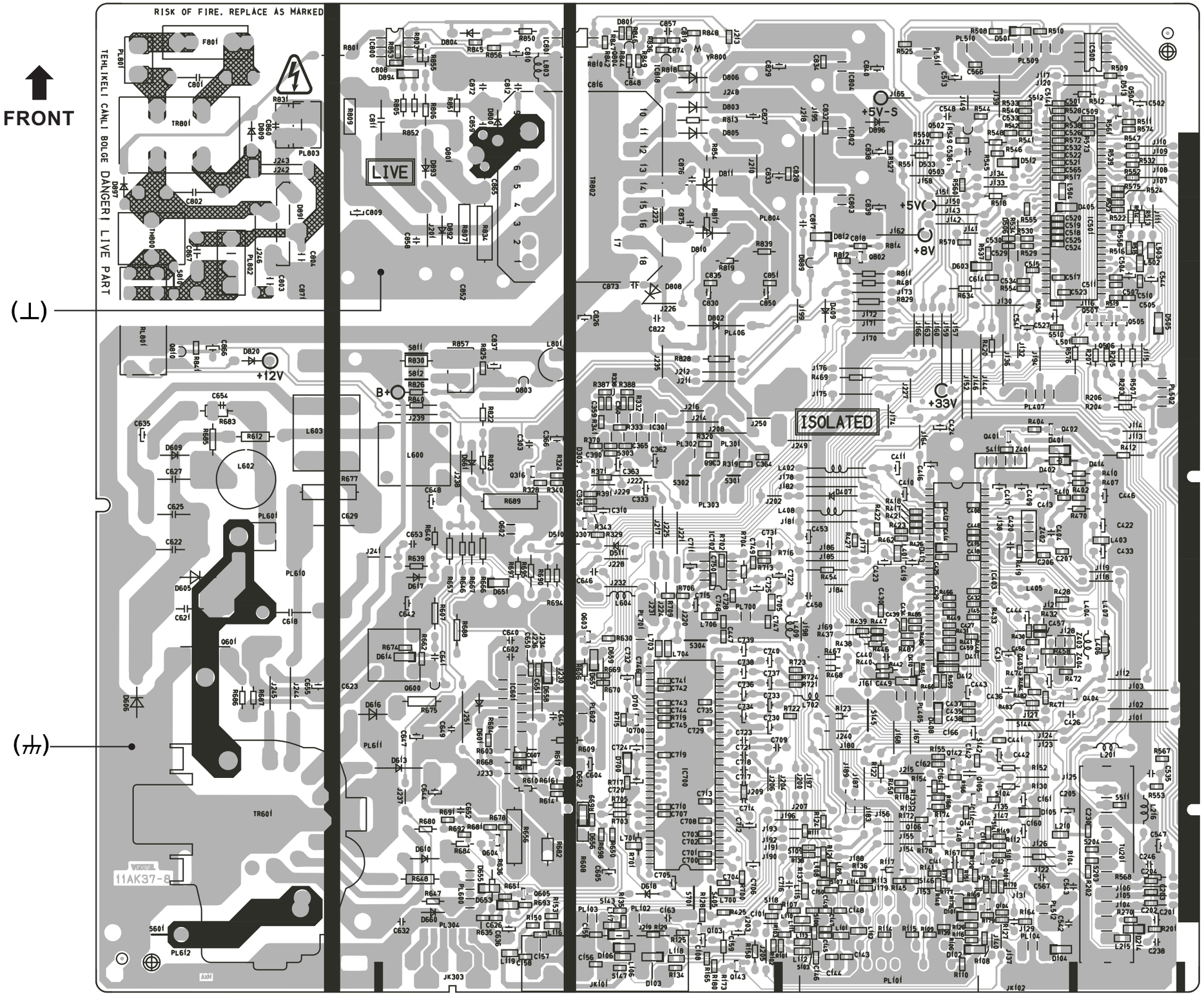

# FRONT CONTROL PWB

**VE-20082481**

(AV-28BT8ENS, AV-28BT8ENB)
(AV-28BT8EPS, AV-28BT8EPB)
(AV-28BT8EES, AV-28BT8EEB)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

## PATTERN DIAGRAMS *MAIN PWB PATTERN*



JVC

**VICTOR COMPANY OF JAPAN, LIMITED**
HOME AV NETWORK BUSINESS UNIT. 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa-prefecture, 221-8528, Japan

VP 0207
DP6060